

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XII. No. 14.
WEEKLY.

BALTIMORE, NOVEMBER 12, 1887.

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FACTS ABOUT THE NEW YORK AQUEDUCT TUNNEL.

When work began on the NEW CROTON AQUEDUCT, INGERSOLL "STRAIGHT LINE" AIR COMPRESSORS AND INGERSOLL DRILLS were adopted on about one-half the line. As the work progressed, the Engineer's Tables showed that the progress on the sections using INGERSOLL MACHINERY AVERAGED HIGHER THAN ALL OTHERS. This induced contractors on the other sections to put in INGERSOLL MACHINERY. Section "A," under Rodgers & Farrell, the first section north of Harlem River, was run for nearly a year with other machinery. In August, 1885, one-half the section was equipped with INGERSOLL DRILLS, which were so satisfactory that ALL OTHER DRILLS were thrown out, and the section was completed February 3d, 1887, WITH INGERSOLL DRILLS EXCLUSIVELY. During the ten months prior to completion, THE MONTHLY RECORDS AVERAGED 218 FEET, 83 FEET in one week, and 265 FEET, 6 INCHES MADE IN 26 DAYS, ALL FULL SECTION TUNNEL, 16x16 FEET. THIS IS THE BEST RECORD MADE IN FULL SECTION TUNNEL ON THE LINE. NATURE OF ROCK HARD GRANITE GNEISS.

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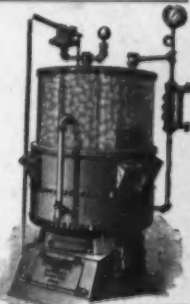


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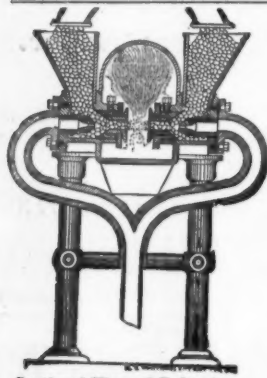
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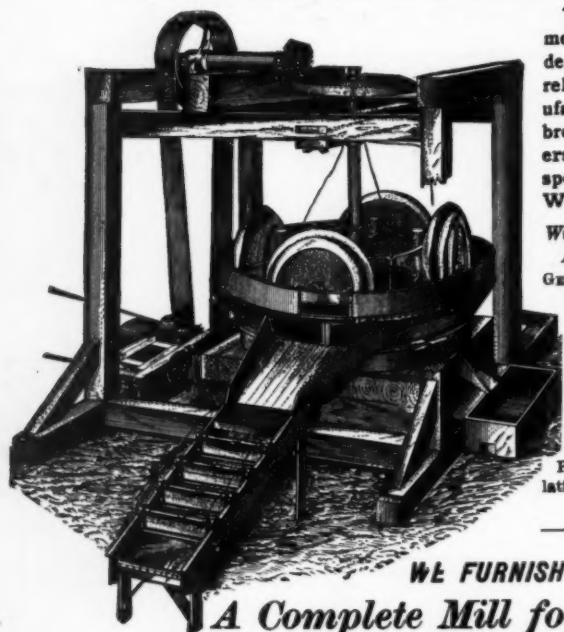


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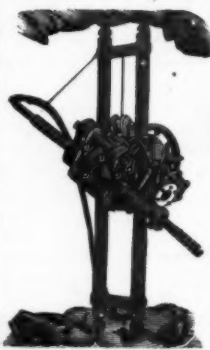
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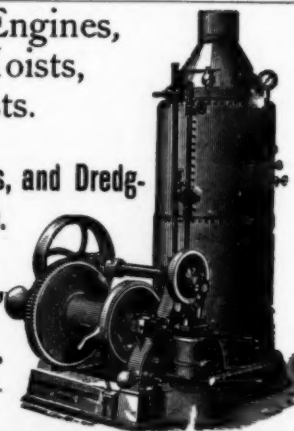
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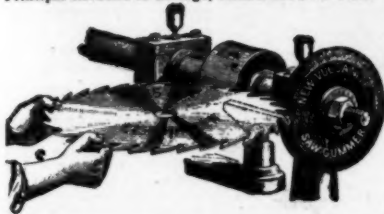
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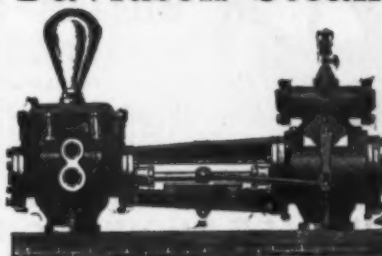
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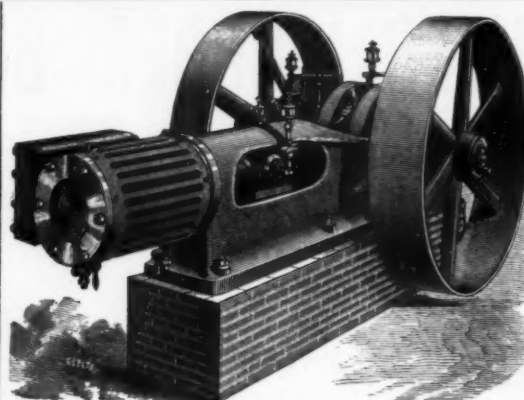
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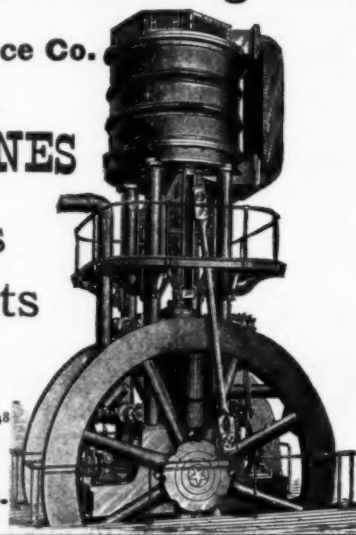
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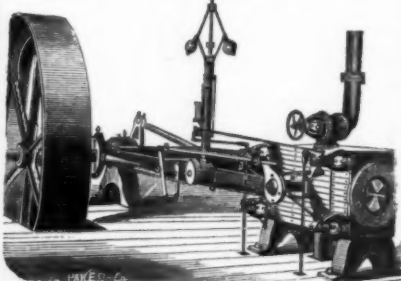
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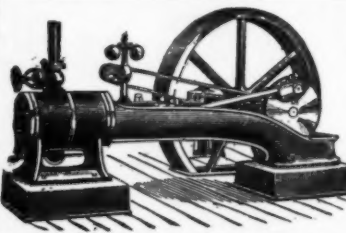
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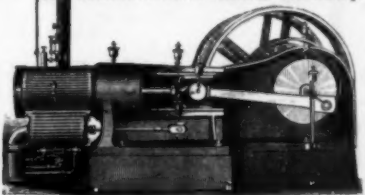
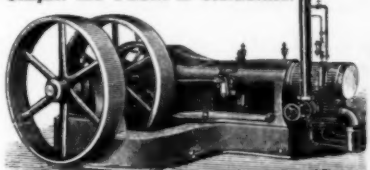
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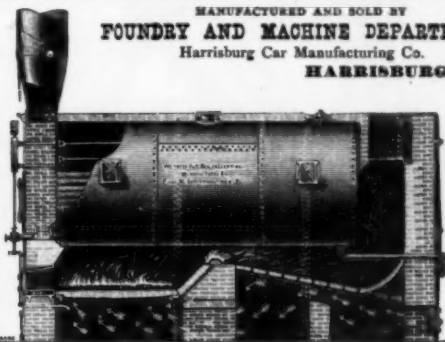
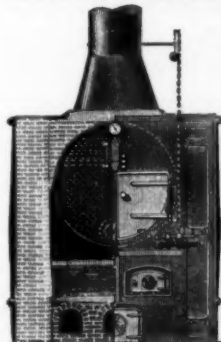
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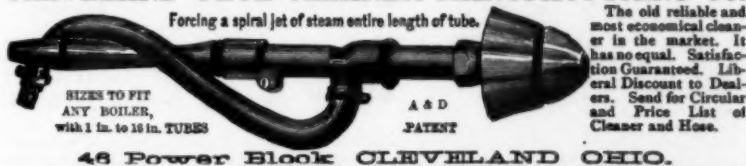
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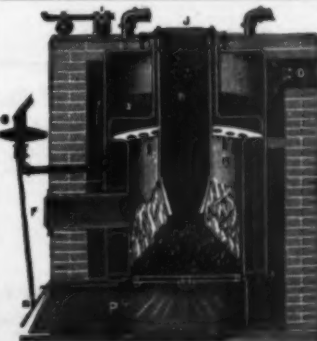
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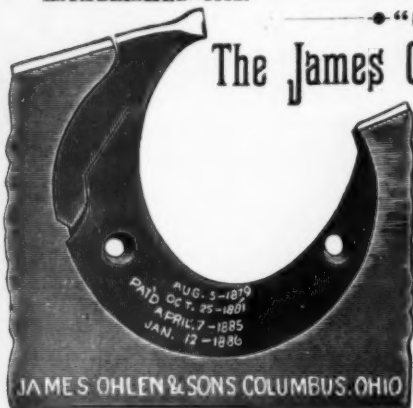
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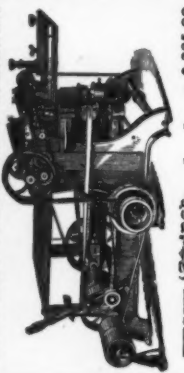
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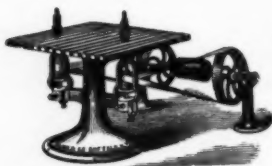
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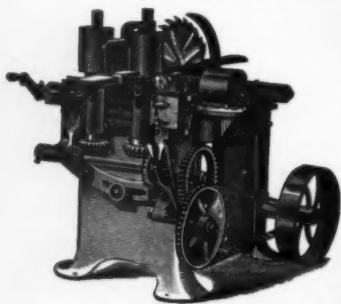
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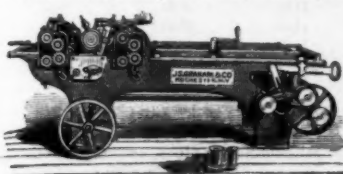
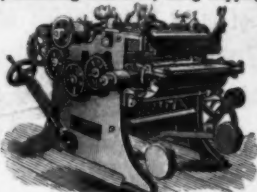
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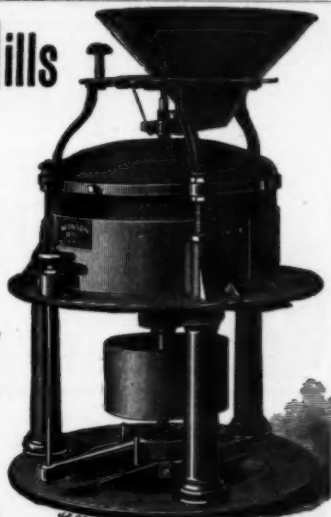
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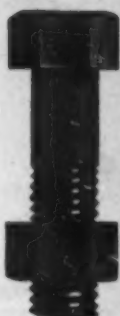
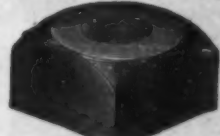
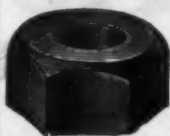
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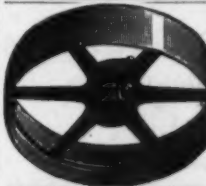
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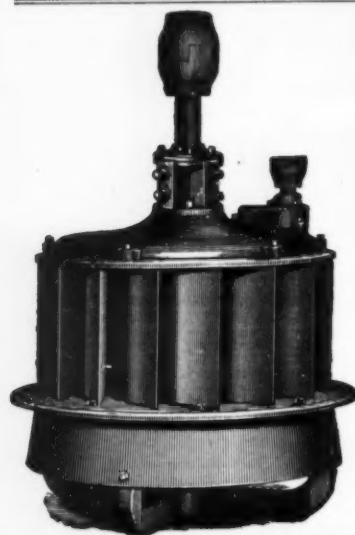
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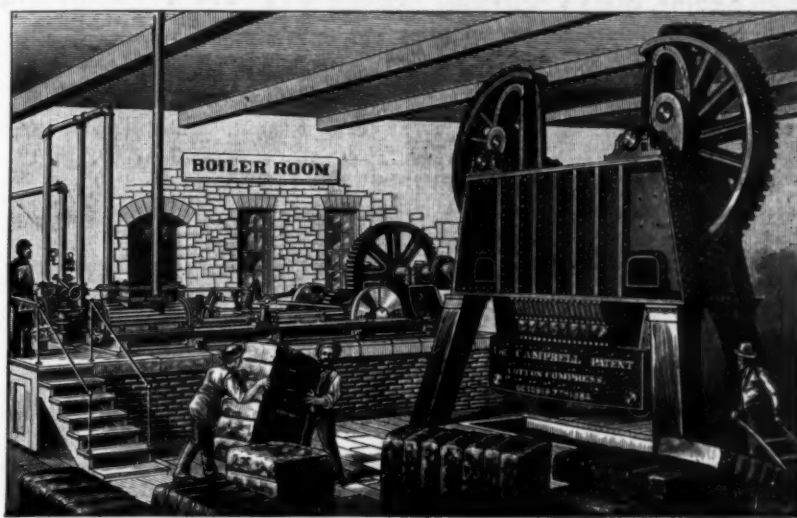
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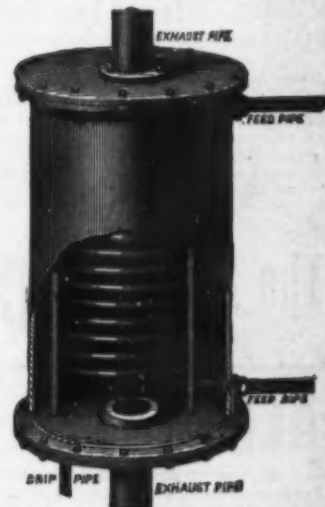
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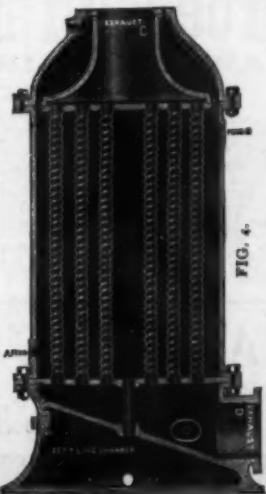
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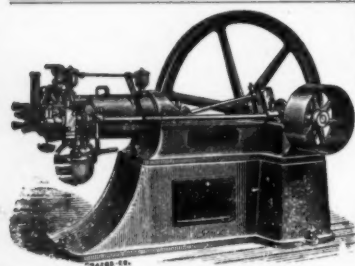
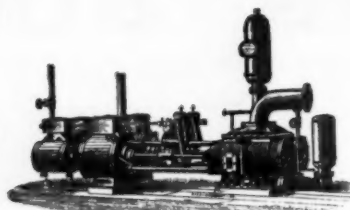
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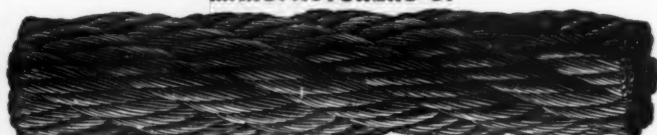
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Manufacturers' Record.

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BALTIMORE, NOVEMBER 12, 1887.

Canning Factories in the South.

Last week, in answer to several letters of enquiry, we gave some facts as to the opening for canning factories in the South. To illustrate what can be done in this line it may be of interest to give a little information regarding the development of the canning business in Botetourt county, Virginia. Several years ago the late Mr. J. C. Moomaw, of that county, determined to engage in canning peaches and other fruits. He had just purchased a farm on credit from his father's estate, and was without the means necessary to engage in fruit canning except on the very smallest scale. At first he gathered the fruit in the morning, his family prepared it for canning and then he put it up in the cans. Soon he found it necessary to employ a few young girls in the neighborhood to assist in peeling the peaches. As the demand for his goods increased, he enlarged his operations and prepared for the future by setting out large orchards, and devoting much of his farm to raising tomatoes and other vegetables suitable for canning.

At the start Mr. Moomaw had everything to discourage him, and his early struggles to make a success of this business so entirely new to him and new to his section were very hard. His farm on which the canning factory was located was way out in the country many miles from even a small town, and as for advantages he had none, except that he owned a farm on which there was a fairly good orchard. But when the writer had the pleasure of meeting him two or three years ago, he had then made a great success of his canning factory, was financially well off and was a leading spirit in the development of that section, having taken an active part in building up the prosperous town of Roanoke.

It was comparatively but a few years ago when Mr. Moomaw started his small canning factory in his own dwelling, and yet his success was so great that others were stimulated to follow his example, and now there are fourteen canning factories in that section, giving employment to hundreds of hands and furnishing a home market for immense quantities of fruits, tomatoes and other fruits and vegetables. What Mr. Moomaw did hundreds of others throughout the South can do.

An Evil Spirit.

The MANUFACTURERS' RECORD has repeatedly denounced the spirit of jealousy which has at times been displayed in Southern towns against other towns. For several years Birmingham has been the target of abuse, and as rapidly as one slander against that city would be killed another would be started. In fact, there seems to have been a "ghoulish glee" in inventing new falsehoods against that place. At one time we are told that it is extremely unhealthy; at another that it has no sewerage system, then that it is but the creation of a fictitious land boom that will soon collapse; then that it can do nothing but manufacture pig iron, and this of a low grade. One falsehood after another has been disproved, and Birmingham, despite the abuse of her enemies, has moved steadily on towards her great destiny. Her growth has been the wonder of the age, and a candid investigator needs but to study the foundations on which she is rearing her magnificent industrial structure to be convinced that she is building as solidly as the eternal hills that surround her, and whose exhaustless wealth of ore furnishes a sure guarantee of Birmingham's prosperity so long as the world needs iron.

Birmingham has been the beacon light to draw to the safe harbor of Southern investment millions of dollars of capital. The men who have made that wonderful place have blazed the road to prosperity that hundreds of other towns and cities may follow after them, and, like Birmingham, attain unto unbounded prosperity. Away, then, with that spirit of petty jealousy that crops out in too many places in the South.

And what is true in this respect as regards Birmingham is likewise true of other places. In Alabama there are some half a dozen or more rapidly growing industrial centers each jealous of the other. The people of one town have no good word for another town. As every man believes every man mortal but himself, so the people of each town are convinced, or at least try to convince strangers, that every town is built on a sandy foundation but theirs. "Our town, as you can see," they say, "is solid, and our growth permanent; real estate, instead of being too high, is really very low, but over in that other town everything is fictitious; land is too high—it is simply a real estate speculation, and the end must soon come." And so the Pharisaical talk goes on, to the injury of everybody. The Pharisee who rejoiced to know that he was not as other men, did the "other men" no harm and himself no good.

Let this jealousy stop. There is room enough for all. Alabama—and Alabama is but a type of the whole South—has barely started on her career of prosperity. Anniston and Decatur, Sheffield and Florence, Bessemer, Talladega and a dozen

other towns, can grow until they surpass Birmingham's present wealth and population, and yet the limit will be by no means reached. Each town has its own peculiar advantages on which to build, and it is worse than folly to be displaying envy and jealousy.

Commenting on this spirit as displayed in unfavorable criticisms of Birmingham, the Age, of that city, says: "Mark it well. To this conclusion, as now they are pointing, must come all those forces that make a nation pre-eminent among its neighbors. Then let's be done with the petty jealousies of one town with another. Here, where Birmingham stands, a few years ago, long after our devastating war, a slender population eked a scant existence out of a stubborn soil. Now a great manufacturing community sustains itself. Millions of capital are invested and hundreds of thousands of dollars are paid out monthly to laboring people."

FOR four years or more the farmers of the Northwest have been favored with the presence of an Englishman from the headquarters of the Cobden Club, who left his native island and settled down among them as a missionary of the gospel of free trade. Selecting Des Moines, Iowa, as his base of operations, he started there a pro British quarto, in which he and his free-trade allies in this country sought to disseminate among the farmers of the West the economic ideas that our brethren abroad wish to have prevail in the United States. There was a great flourish of trumpets at the beginning of this journalistic endeavor. Mr. Philpot, the editor, unquestionably believed that, assisted by David A. Wells and other natives, his trenchant pen would work wonders and convert the farmers of Iowa and all the surrounding States to his un-American economic notions. Like many another of his stamp, this missionary of free trade found he had underrated the intelligence of the people he sought to convert. At the first he was gladdened with a subscription list of no inconsiderable length, but as his work developed and its true character was revealed, the men whom he had foolishly supposed to be as dull and stupid as some of his own country squires dropped, his paper in such numbers that finally he was compelled to suspend its publication. The Philadelphia Times calls this "a significant straw," and says: "The farmers of the great West were not long in penetrating the thin guise of duplicity and anti-American interest which was its sole motive. Its subscription list dropped in numbers, even the little sum of fifty cents a year failing to act as an inducement." We greatly fear that some of our valued contemporaries in the South will find themselves suffering from a similar cause ere long, hence we set before them this warning example, and advise them to turn before it is too late.

Railway Building.

The present year will in all probability show the largest amount of railway track laid ever recorded. The highest figures for any preceding year were 11,568 miles in 1882, while the mileage this year will doubtless exceed 12,000 miles. According to the statistics of the Railway Age of Chicago, the standard authority on such matters, there had been laid up to Nov. 1 9,408 miles of main track, not counting hundreds of siding and additional track. This great work, says the Age, has been going on in 41 of the 47 States and Territories, and the number of lines thus taken by States aggregates 274, although in several cases the same road is reported upon in two or more States. The following table summarizes the detailed returns, so far as we have obtained them, up to November 1:

Track laid from January 1 to November 1, 1887.

No. of roads.	Miles.	No. of roads.	Miles.
Maine.....	8	Wisconsin.....	7
Massachusetts.....	31	Minnesota.....	176
New York.....	6	Dakota Ter.....	54
New Jersey.....	1	Iowa.....	243
Pennsylvania.....	3	Nebraska.....	18
Maryland.....	1	Kansas.....	34
West Virginia.....	1	Missouri.....	12
Virginia.....	3	Indian Ter.....	4
North Carolina.....	9	Arkansas.....	7
South Carolina.....	2	Texas.....	14
Georgia.....	6	Colorado.....	10
Florida.....	6	Wyoming Ter.....	1
Alabama.....	13	Montana Ter.....	3
Mississippi.....	3	California.....	8
Louisiana.....	3	N. Mexico Ter.....	1
Tennessee.....	7	Idaho.....	1
Kentucky.....	5	Utah Ter.....	1
Ohio.....	14	Arizona Ter.....	1
Michigan.....	10	Oregon.....	3
Indiana.....	6	Washington Ter.....	1
Illinois.....	7		
Total in 41 States and Territories.....	974		9,408

These figures for 10 months considerably surpass those for the same period in the remarkable year 1882, when a total of 11,568 miles of new road was built. They also show that already in 1887 more track has been laid than in the whole of 1886, and nearly as much as in 1881, when 9,796 miles were added, while they put far in the shade the record of all other years in the history of this or any other country. While work has been completed for the year upon several of the great lines it is still in progress on many others so actively that already considerable additions have been made since the date of our last returns, and if the weather continues favorable the final reports will be certain to show an addition of several thousand miles over the figures here given. As a means of comparison we reprint the following summary of tracklaying during each of the twenty years preceding 1887:

Track laid in each year for twenty years.

Year.	Miles.	Year.	Miles.
1867.....	2,249	1877.....	2,280
1868.....	2,979	1878.....	2,600
1869.....	4,615	1879.....	4,746
1870.....	6,070	1880.....	6,876
1871.....	7,379	1881.....	9,796
1872.....	5,878	1882.....	11,568
1873.....	4,097	1883.....	6,241
1874.....	3,127	1884.....	3,805
1875.....	3,711	1885.....	3,608
1876.....	3,718	1886.....	9,000

Of the Southern States Texas leads with 834 miles, followed by Alabama with 377 miles, and then Georgia with 219 miles. During the first ten months of 1887 Alabama built more miles of railroad than all of the New England and Middle States and Ohio combined.

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Certainties and Uncertainties.

There are certain indisputable facts of momentous importance it is wise to keep in mind. These may be classed under two heads—first, the steady advance of the entire country in wealth and population since 1861; secondly, the vast natural resources known to exist that have not yet been touched by capital and enterprise. Reasoning from the solid foundations these afford, there could be but one conclusion as to the future of our country were it not for existing uncertainties. These are occasioned by the unremitting efforts of free traders, both foreign and American, to carry the country back from the protective policy, adopted in 1861, to that which existed for many previous years. Were American capitalists, manufacturers and merchants sure beyond a peradventure that there would be no material change in the national policy in this respect, the progress of the coming years could easily be calculated, for all the elements which would help to make it are known, and their probable effects could be computed with almost mathematical accuracy. Eleven years ago this country celebrated its first centenary, and at that time its marvelous history was repeatedly told by the most eloquent orators and the greatest writers. The story was republished all over the world and read by wondering millions. A great impetus was then given to all our industrial pursuits, and the country entered upon its second century flushed with a sense of past achievements, and buoyant with hope for the future. Since then advances have been made in all forms of enterprise on so grand a scale, that, if continued, the splendid growth of the first hundred years of our national life will be equalled if not surpassed in the twenty-five that will end with the first of the twentieth century. Most noteworthy among the events of the period extending from 1861 to 1881 was the development of the West from the Mississippi to the Pacific coast. During those twenty years great portions of the wilderness were redeemed from barbarism and covered with farms, villages, towns and cities, abounding with all the comforts and adornments of civilization, while the natural resources of their mountains, forests and plains were discovered and utilized for the benefit of mankind. From 1880 until now a similar progress has marked the history of the great States of the South, large portions of which were to all intents and purposes as much an unknown land as was the "terra incognita" that lay between the Rocky mountains and the Pacific ocean.

Now what was it that made possible this wondrous development both West and South, if not the protective tariff of 1861? "Ah!" say our free-trade friends, "you cannot make us believe that. It was the building of railroads across the continent that

did the one; it was the revelation of the natural wealth of the South that caused the other. Surely, you cannot claim that either of these were in any way influenced by protection." The MANUFACTURERS' RECORD does believe this, and for good and sufficient reasons, a few of which will be stated.

The building of the Union and Central Pacific (the two, when connected, making the first line across the American continent) was a war necessity. Without that line the Pacific coast might have been separated from the republic and have eventually become the possession of one or more foreign powers. With it ocean was joined to ocean and the people of the Western coast were safe from foreign aggression and felt the warm heart beats of our national life. But had it not been for protection and the wealth it gave to the Eastern, Middle and Ohio Valley States, the funds for building that great line could not have been furnished. No foreign capital would have been invested in the construction bonds issued had not Americans been their first and very large purchasers, and the majority of those of the latter who bought them were enabled to do so because of the wealth that came to them through protection. The fact that Americans had confidence in the future, as shown by their investments in the securities of those roads, inspired foreign capitalists with confidence and induced them to furnish the final funds for the construction of that important line from the Atlantic to the Pacific. Without the confidence thus created, not even the indorsement of these bonds by the national government would have been of any avail, and had it not been for protection and the wealth it furnished there would have been little American capital for investment in those or any other securities. The opening up, therefore, of all that vast region is primarily due to protection.

Later the effects of the same beneficent policy were felt in the South. The iron and coal mines that have been opened, the railroads that have been built, the thousand and one new industries which have cost millions of money and are giving remunerative employment to tens of thousands of wage earners, could not have been but for protection. Anniston, Birmingham, Chattanooga, Decatur and Atlanta are living and thriving illustrations of what will be in many places in all the fair Southland if protection shall be continued. There are hundreds of locations by the side of unutilized water-powers, or covered with virgin forests, or adjacent to unopened deposits of coal, iron and limestone, that will at an early day be the sites of prosperous manufacturing towns if the protective policy shall be continued. These are not optimistic prophecies, but certainties of the future, if only it shall be made equally certain that the free

trade delusion is dying out. The last is the one element of uncertainty that interferes in the least with the progress of the South and of the whole country.

An Advance Step for Birmingham.

The Elyton Land Co., to whose remarkably good management Birmingham's magical growth is largely due, has taken another advance step that is destined to exert a great influence upon the future of that progressive city. At a meeting of the directors of the Elyton Co. last week it was decided to organize immediately a loan and trust company, with a paid-up capital of \$500,000, of which \$200,000 is taken by the Land Co., \$60,000 by the directors of that company, and the balance by New York and Birmingham capitalists.

Money will be loaned on both real estate and personal security, but principally on real estate. The company will have a savings department connected with the bank, and will pay interest on deposits in that department. Col. Troy, one of the directors, states that their loans will not be limited, but if there is a demand for more than \$500,000 they will put in more and can loan \$5,000,000.

It is almost needless to comment upon the great benefit to Birmingham of this move. Real estate owners will now be able to secure loans on their property more readily than heretofore, and the money raised in this way will largely go into permanent improvements and new industries. The company also decided to offer unusually liberal inducements to secure the location of new industries.

MR. JOHN M. ROBINSON, of this city, has been elected president of the Old Dominion Steamship Co., of New York, to succeed the late Mr. McCready. Mr. Robinson has for many years been the vice president of this company, which is, we believe, the largest steamship company in America, owning about 20 to 25 steamers and steamships. Its business is enormous, the Norfolk & New York Line alone often sending out from each port a heavily loaded steamship every day during the busy season. There are few men in this country who control and manage larger steamship and railroad interests than Mr. Robinson. In addition to the Old Dominion Steamship Company, he is president of the Old Bay Line of steamers, running between Baltimore and Norfolk, president of the Seaboard & Roanoke Railroad, the Carolina Central Railroad, the Raleigh & Augusta Air Line and the Raleigh & Gaston Railroad. Under Mr. Robinson's presidency these enterprises have been eminently successful. They have been free from all speculative deals, their management having given great satisfaction to their patrons, and yielded large profits to their stockholders.

The Cotton Crop.

The November crop report of the Cotton World, of New Orleans, is as follows:

The outcome of the season is disappointing in comparison with September expectations, and a crop even smaller than that of last season is reported in the returns. In Arkansas, Texas and Tennessee the drouth cut short the yield greatly. The contrast in many portions of the first named State is greater by reason of the good yield of last season. In Texas the crops were spotted. Contrasted with these the Atlantic seaboard States fared better, and, while not reaching the expectations of the late summer, will get more cotton than in 1886. The Georgia crop is very much spotted, and a careful review by counties does not justify some of the general opinions of the product of State received from merchants at large centers. On the other hand the Carolinas will come up to the late general estimates, or exceed them. Alabama has not turned out anything like what was very recently estimated, the larger yield in some sections being more than offset by a decrease in others. In the lower Mississippi valley the yield, while so much below the promises of the early fruiting season, is yet above last season, but the gain has been all in Mississippi.

The picking season has proved very favorable on the whole, and the crop has been gathered unusually early. Nearly all over the belt from two-thirds to seven-eighths of the crop was reported as picked at the date of our replies. As foreshadowed, however, in the last report, the top crop has proved a failure nearly everywhere, and little was made in October. The worms cut short the prospects in many sections, adding to the damage by drouth. Light frosts in all States and killing frosts over a very considerable part of the belt have been reported during the past month.

Below we give our estimates of production by States:

States.	Acres Cotton Planted.	Yield per acre. Hundredths of Bales.	Production, Bales.
Virginia.....	215,700	31	35,867
North Carolina.....	1,045,300	37½	390,208
South Carolina.....	1,550,400	36½	563,645
Georgia.....	2,950,000	30 1-3	890,900
Florida.....	247,300	25	61,800
Alabama.....	3,765,800	29½	808,897
Tennessee.....	832,600	31½	263,656
Mississippi.....	3,338,800	39	919,932
Arkansas.....	1,325,700	28½	513,708
Louisiana.....	1,085,300	45½	494,802
Texas.....	3,774,800	34½	1,311,743
Totals.....	1,799,500	34 3-5	6,224,258

The Rising Tide.

The Timberman, of Chicago, says:

It is predicted by those who have as good an opportunity as any of informing themselves regarding such matters, that there will be a greater rush this season for Southern timber lands than was ever before known. Examined closely, it will be found that this expectation rests upon a reasonable basis of fact and inference. The interest in Southern timber investments has been increasing year by year for a considerable time. Ten years ago one might easily have induced a Northern lumberman to investigate a South African diamond mine than to have prevailed upon him to look into the merits of Southern timber as an investment. * * *

For the last three years there has been going on a very quiet but enormous traffic in Southern timber. Each succeeding year since this movement began has seen it gain in volume and strength; and it does not appear that this tide has yet reached its full flood, and is on the point of turning. There are men talking of Southern lands and contemplating investments in them, who have until this year regarded the matter with indifference if not with positive disfavor. They are now among those who are most anxious to secure a quantity of the cheap timber in which the South abounds, and it may almost be said most fearful that the choice purchases are already taken up. It is natural for one man

to do as his neighbor does, especially if he happens to have great confidence in his neighbor's judgment and business sagacity, and hence it is to be expected that many will follow the example set them every day by some of the heaviest as well as the shrewdest and most careful operators in the country; men celebrated not alone for their conservatism in dealing with new schemes, but also for their uniform success in selecting investments that involve the smallest risk with the largest profit. We see these men going into Southern timber with a freedom that might seem to border upon recklessness, and we shall see others following rapidly in their footsteps. There is more money available for investment than ever, and it is plain that its possessors will not lose another year in getting it placed if they have in mind putting it into Southern forests. The reports floating around that all the government pine in certain districts is out of the market forewarns them that the day of dollar and a quarter land is fast drawing to its end. The inevitable rise that will follow the sale of the last of the timber to be got at this price is clearly foreseen, and hundreds will take the small opportunity that is left to secure something, if not all they want, before this comes. There is a prospect now of a quick turn to be made, and the rush to take advantage of it is pretty sure to keep the land men busy all winter.

ONE of the objectionable features of the interstate commission law has just come to light. Complaint having been made against the North Pacific Railroad Company by some disgruntled citizen of illegal discrimination, because that company gave special rates to settlers or prospectors, the commission, after hearing both sides, decided that to do so was a violation of the law. Consequently the Northern Pacific and all other railroads that have endeavored to build up the unsettled portions of the country traversed by their lines will be compelled to give up selling that class of tickets, and oblige settlers to pay the same fares as all other travelers. This will be a hardship, for the majority of those who go West to "grow up with the country" are men of small means with large families, who have to count every penny of cost, and often to live very closely for a number of years to accumulate money enough to make the journey. Yet from this class has been derived very largely the men who have built up the prosperity of the great West. Many of the trunk lines traversing the South have of late years adopted the wise policy of the land grant roads of the West, and the several States along their line have been materially benefited by it. If the interstate commission law is to remain in force, here is a provision that should be changed, for it militates against a poor but thrifty and industrious class of people, and interferes with the general prosperity.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

Talladega, Alabama

What is Being Done in Developing the Many Resources of that City and Section.

TALLADEGA, ALA., Oct. 31, 1887.

Editor *Manufacturers' Record*:

It has been said, and truly, too, that Talladega city and county possess more natural advantages, more minerals and a better situation for manufacturing enterprises than any other city or county in the entire State of Alabama. To verify this statement you have only to keep watch of the many new developments being made, and the gradual but sure drift of Northern and Eastern capital seeking safe and profitable investment in the South and the State. Much has been written and published concerning this section, and one extract from a description of the city and county recently, says: "It is one of the curiosities of development that the county of Talladega was so long passed by and that she was not made the seat of the earliest iron furnaces and the greatest of mineral cities. But the men who were developing Alabama, by accident rather than otherwise, selected localities beyond the borders of this county as the sites for building cities, while they utilized her wealth of ores and timber." The fact has never been controverted as regards the virtual theft of Talladega county's products for the building up of other cities. Yet, notwithstanding this, she is fast waking up to the fact and keeping in line with the true progressive spirit.

Within the past two months there have been established in the city of Talladega numerous enterprises, with unlimited capital at their command, that guarantee the expenditure of nearly a half million of dollars. The blast furnace, with a daily capacity of 70 tons, is an assured fact. The Talladega Brick & Tile Co., composed of Messrs. E. O. Hellorwell, Dr. S. D. Rhodes and George R. Anson, of Bellevue, Michigan, is in operation, and will manufacture brick and tile on a large scale. The spoke and handle factory to be established by Boston capitalists has passed the uncertain stage and will soon commence operation. The three rival lines of proposed railroads through the city have consolidated, and work has commenced on the through air line from Macon, Ga., to Birmingham, Ala., reaching it, it is confidently expected, this city early in April, 1888. A valuable vein of lead ore has recently been discovered in the lower end of the county, which will be developed. A stock company has been formed for the manufacture of jug ware by Dr. R. A. Moseley, Jr., and associates, from the inexhaustible clay beds on the property of Dr. Wm. Taylor, six miles from the city. Col. J. M. Sullivan and associates have bought the Riddle gold mines for \$20,000, and will erect a 15-stamp mill, employ day and night forces for its rapid development. Col. Sullivan will remove his family to this city, as will Col. Wm. Ashley, who is interested in and will be secretary of the company. The East Tennessee Railroad Co. have let the contract for the erection of a new depot.

These, with a few other incidents, are giving our people new vigor, and they realize that it is only a question of a few years before enough diversified industries will be in operation to justify the title of Progressive Talladega.

At the recent State Fair, held in Montgomery, Talladega county received first prize for best mineral display, same as she has done for four successive years. It will not be amiss at this stage to pay a most worthy tribute to Captain W. T. Webb, who was in charge of the county exhibit, for much valuable aid rendered by explanations concerning the mineral wealth of the county.

The Talladega Land & Improvement Co., with the able and energetic management of its president, Hon. W. H. Skaggs, is doing

its share in developing the city in sundry and divers ways.

With this brief outline of what the people are doing in the way of progress in Talladega, I desire to say, in conclusion, that no man or corporation is more entitled to a word of praise than the MANUFACTURERS' RECORD for the part taken in the upbuilding of the South and Alabama, and too much cannot be said in its behalf. SERGIUS.

Mississippi Notes.

Agricultural and Manufacturing Items.

[Special correspondence MANUFACTURERS' RECORD.]

ABERDEEN, MISS., November 5, 1887.

Mr. L. L. Cole, of Noxubee county, says the Macon Sun, "will make this season over \$3,000 off of hay harvested on rented land. He paid \$200 rent and at a big estimate \$300 for saving the hay, and he has a clear profit of \$2,500 on a \$500 investment. This beats Alabama coal and iron lands." Noxubee is a prairie county.

The Yazoo City Herald publishes a list of 35 prominent Yazoo county cotton planters who have purchased mowing machines and horse rakes recently, and have become largely interested in hay making. Yazoo is a "bottom" county.

The Water Valley Progress estimates the crop of sorghum molasses made in the vicinity of that town this year at over 50,000 gallons.

Mr. S. H. Berg, of Aberdeen, whose brick factory is supplied with one of the most powerful steam machines, finds it impossible to meet the demand.

The receipts of cotton at Aberdeen for October 30th amounted to 9,000 bales for the season commencing September 1st. As Aberdeen is a town that buys all the cotton it ships, this represents over \$400,000 in cash paid out to the farmers who haul to her warehouses, a large portion of which is, of course, left with her merchants.

The Aberdeen Examiner says there are over 500 well-bred colts in Monroe county under one year of age, and hundreds of young mules.

The exhibit of jacks at the Aberdeen fair last month is claimed to have been the finest ever seen in the Southern States. They were all imported Spanish animals. Monroe, Lee and Pontotoc counties were represented.

Among the prominent exhibitors of blooded stock at Aberdeen (particularly Jersey cattle) were two chancellors—Messrs. McFarland and Critz—and one circuit judge—Hon. L. E. Houston. It is a curious circumstance that almost all of the judges and chancellors, and most of the prominent lawyers and statesmen of Mississippi are breeders of Jersey, Holstein and Durham cattle. Among others, Hon. L. Q. C. Lamar, Secretary of the Interior; Hon. H. L. Muldrow, First Assistant Secretary of the Interior; Hon. J. M. Allen, representative in Congress from the second district; Hon. Edward Moyes, chancellor of the State University; Hon. W. L. Hemingway, State treasurer; Judge Arnold, of the Supreme Bench; ex United States District Attorney Chandler; W. A. West, chief inspector of the post-office department, are extensive breeders. This was also notably the case in ante bellum times in our State.

In 1885 Mr. E. L. Sutfin, of Chicago, invested \$4,500 in timber lands in Yazoo county, and last week he completed his sales of these lands to settlers, clearing as net profit \$30,000 in two years.

Mr. W. E. Gibson, of the Duck Pond neighborhood, in Yazoo county, has packed 140 bales of hay this season.

The Vickburg Herald has been shown a 15-pound sweet potato of this year's crop. Reports of 5 and 7-pound potatoes are common.

Mr. E. H. McGinty, of Yazoo county, has

made this year 150 gallons of fine molasses from the product of half an acre planted in Louisiana cane.

Mr. J. W. Holt, of the Benton neighborhood, is one of the leading hay farmers in Yazoo county. In an interview reported by the Yazoo City Herald he says among other things that he keeps two hands at work cutting and packing hay from June until Christmas. He has sold this season between \$500 and \$600 worth in addition to putting up more than enough to supply his numerous cattle, horses and sheep. His hay is made from the spontaneous growths of our State, chiefly Bermuda and *Leysperdia striata*.

One of the premiums on Devon bulls at the State Fair at Jackson was awarded to an exhibit entered by Bishop Thompson, of the Episcopal diocese of Mississippi. Another was taken by the students of Tongaloo College, an institution for the education of colored youths.

There is every probability of the Louisville & Nashville Railroad Co. soon building a branch from their coast line from Scranton to the great milling beehive of the South, Moss Point. Now all of the lumber from those mills is shipped by sea from the port of Pascagoula to foreign and domestic ports, being carried in lighters by tugs from the mills to the fleet of vessels off the coast, for the reason that it will not pay to haul it in wagons from the mills of Moss Point to the depot at Scranton, a distance of over three miles of bad road, and go through the frequent handlings of mill expense incident to that process; but, if the branch road is built, the lumber will be loaded on the cars at the mills, and find its way to markets of the East, West and Northwest to which it has heretofore had no access. Moss Point lumber is better known to every seaport of Mexico, South America, Central America, Europe and Africa than to any port on our own Eastern coast.

Madison county claims to be able to exhibit 500 colts "equal to anything from the blue-grass pastures of Kentucky." She prides herself upon her high-bred cattle, including Jerseys, Devons, short horns, Gallaways and Holsteins. The county fair grounds embrace 20 acres of beautifully located land within a few hundred yards of the court-house in Canton. This county was always noted for her fine stock in old times, and at the famous fair at Manchester, England, many years ago, wool grown in Madison county took the premium over all of the wools of the world.

Speaking of wool reminds us of again calling attention to the fact that the open piney woods of South Mississippi can hardly be paralleled as a sheep walk. In referring to this matter, the manager of the Mississippi Mills, at Wesson, in Copiah county, an establishment that probably makes more brands of woolen goods and has taken more premiums on its manufactures than any other mills in the country since the war, said: "The finest wool in the world is grown in South Mississippi, and the success of our mills at all of the fairs and expositions is due as much to the superiority of the wool used as to skill in handling it."

The pumpkin crop, which used to be such an enormous one in Mississippi before the war, is again an important item in her extensive list of products. More of them were raised this season than ever before in the recent past.

One hundred and one bushels of corn were raised on one acre of land in Lake county this season on poor land. This shows what can be done by scientific farming.

The Queen & Crescent and the Louisville, New Orleans & Texas Railroad Companies have determined to add largely to their terminal and transfer facilities at Vicksburg.

Mr. Mathis, of Copiah county, raised 98 bushels of splendid corn on a single acre in that county this season.

October peaches were common and excellent in Mississippi.

The cotton factory at Port Gibson has secured the services of Mr. Dolphin, of Montgomery, Alabama, as superintendent, and will commence operations shortly.

We understand that the cotton factory in course of construction at Columbus has contracted for its machinery.

The Floweree Ice Co., of Vicksburg, expect to add another ice machine to their plant this season.

The vastly increased freight receipts reported by all the railroads in our State for the months of September and October over corresponding dates in 1884, '85 and '86, afford the best of commentaries upon the progress and prosperity of Mississippi, for the tariffs were never as low as they are now.

The work of locating the branch railroad from Corinth to Pittsburgh Landing, on the Tennessee river, is completed. The distance is about twenty miles.

The shipments of lumber from the port of Pascagoula for the week ending November 3 amounted to 1,099,514 feet of lumber and 20,000 shingles. Of this amount 438,112 feet went to Cienfuegos; 367,000 feet to Boston, and the remainder to Key West, Florida.

At the Noxubee county fair last month at Macon there were many very attractive exhibits. In the line of poultry, W. M. Jones exhibited 32 coops, representing as many varieties, and R. C. Patty 26 coops, while many others were represented by smaller lots. Cattle, horses, mules, colts, sheep, hogs and goats were represented by hundreds of fine specimens, and there were six premiums offered "for the best boy milkers," for which there was active competition. The dairy exhibit was grand; there were dozens of splendid butter exhibits and it was very difficult to decide between them. The entire lot of specimens would have brought gilt-edge prices in New York.

How Is It?

The Wytheville (Va.) Enterprise says:

We are free from exaggeration in asserting that we have read the statement at least a thousand times in the last five years that a high tariff benefits only the manufacturer; that it fails to make the operatives and laborers rich, but makes millionaires of a great number of their employers.

We would like to know, if this be a fact, how the \$750,000,000 deposited to the credit of wage-workers in the different savings banks in this country was acquired, and why it is that by far the greatest proportion of this vast sum is found in the vaults of those banks that are established in the greatest manufacturing districts? These savings banks in New England alone have \$300,000,000 of deposits, nine-tenths of which are the surplus earnings of working men and women.

Bessemer Ores in North Carolina.

ALL HEALING, N. C., Oct. 25, 1887.

Editor Manufacturers' Record:

Messrs. Parrott and Armstrong, of Kings Mount, N. C., have recently developed immense beds of Bessemer iron ores near King's Mountain station, on Atlanta & Charlotte Railroad. The ores contain from 46 to 65 per cent. metallic iron, and are exceedingly low in phosphorus, sulphur and other impurities. The various veins show from 3 to 14 feet in thickness at intervals on their property for a distance of about four miles. A sample lot of the ores attracted favorable attention at the Piedmont Exposition, parties having already visited this locality to learn more about these ores. W. W. VAN NISS, SR.

THE Sheffield Manufacturing Co., Sheffield, Ala., want a steady, sober man capable of setting or keeping in repair any wood-working tool.

The Furman Steam Heater.

This boiler, manufactured by the Herendeen Manufacturing Co., of Geneva, N. Y., gives every promise of being a very rapid and effective steam generator. Its strong principle consists in the rapid circulation of water and steam as accomplished by an upright circle of tubes surrounding the fire and making the fire-box, and other shorter tubes hanging down directly over the fire, all of which screw into the steam and water dome above. Each of these tubes has an inside drop tube for the circulation down-



THE FURMAN STEAM HEATER.

wards of the water before it is generated into steam.

The fire lies directly in the center of the circle of tubes, and is especially effective, as it strikes squarely against the tubes mentioned, and has to travel around to the bottom of the boiler at the rear before it is allowed to escape into the smoke-pipe.

The boiler is entirely portable and requires therefore no brick-work to set it. It is manufactured either as a self-feeder for coal,

Cost of a Cannery Outfit.

In view of the great interest in canning factories in the South the following particulars as to the cost of the necessary equipment, as furnished to the Lynchburg Virginian by a correspondent from Botetourt county, noted for its many successful canning factories, may be of interest:

The capacity of the fixtures herein described is adapted to a "small cannery."

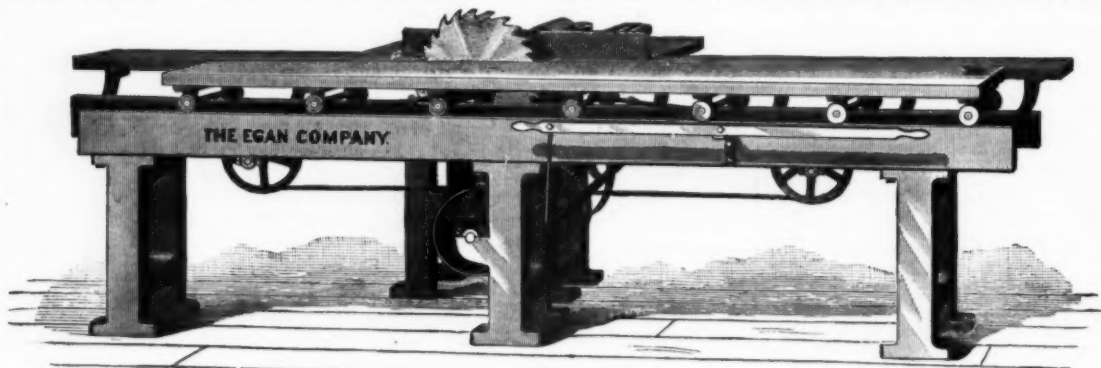
The cases of boxes in which the cans are packed for shipment, and which hold two dozen cans, cost for cases that hold 24 two pound cans 7 cents each; for cases that hold 24 three-pound cans 9 cents each.

The price paid for shelling peas is 5 cents per gallon; for peeling tomatoes one cent per bucket, that is, the common wooden bucket; for peeling and seeding peaches 12 cents per bushel; peeling apples 10 cents per bushel. These are the prices when the hands are boarded at the cannery. If they board themselves 15 cents per day is allowed.

In the foregoing statement of expenses of starting a cannery nothing is said about a house to cover the machinery and operations. This may be a very plain cheap shed, or a more costly building, or some old building may be adapted to the purpose. A house with an area of floor equivalent to 25x40 feet would be sufficient. Leaving out the cost of the house and of the process kettle, necessary if corn and peas are to be canned, the sum of \$325 will, I am informed, cover the expenses of starting a cannery for tomatoes, peaches, apples and all kinds of berries.

Self-Feeding Carriage Edging Saw.

We illustrate on this page a new self-feed carriage edger designed for edging up stuff accurately and rapidly, especially where parties need a machine that will stand up to heavy work. The frame and ways are of iron planed perfectly true. The table is of wood and is built up and placed upon rollers and brackets. The carriage is fed forward by the movement of a lever which puts in motion a drum carrying a rope to which carriage is also attached. The carriage is reversed by a reverse motion of the lever; it is fed back at a very rapid speed at about the rate of three to one forward. The lever will be found convenient to operator at any place he stands. The patent friction device for feeding forward and reversing the motion of the carriage is very complete and durable. The manufacturers claim that there is no possibility of its getting out of order, and it is made on the most scientific principles to prevent any possible wear. When desired the machine will be furnished with carriage to move by hand power, thus making a first-class machine for hand edging. The builders make five sizes of this machine, 12, 14, 16, 18 and 20 feet in length, and any special length can be made



SELF-FEEDING CARRIAGE EDGING SAW.

or as a surface burner, as desired. The manufacturers place a very strong guarantee on it, and offer it free to any responsible party for a 60 days' actual trial before purchase. It is made in 12 sizes, capable of warming the smallest cottage up to a good sized church. It is also used with great success in greenhouse heating, where, affording as it does an even and mild temperature, the sensitive and tender plants thrive especially well.

The boiler must, from its construction, be a very powerful steam producer, and extremely economical in consumption of fuel. We advise the trade and all persons interested in steam heating to write to the manufacturers for their illustrated catalogue containing full description and price list.

cost \$225. With this kettle you will have a set of crates.

Leaving out this we have the following additional items: Open kettles and crates, extra, cost \$6 to \$8; exhaust box \$17; crane, to hoist crates out of the kettle, \$13; air pumps \$6; oil tank \$8 to \$25; free pots \$8 to \$10; Debow capping tools \$3 each. Two of these will be necessary for each man, but one "capper" is sufficient in a small cannery.

The prices of cans, if they are bought at the right time, are for two-pound cans \$1.78 per hundred; for three-pound cans \$2.45 to \$3 per hundred.

to order. They furnish with each machine one of their patent expansion extra heavy saw mandrels, and an adjustable fence moving in a dovetailed groove. For further information and prices of this or cuts and prices of any other improved wood-working machinery address the manufacturers, the Egan Company, 228 to 248 West Front street, Cincinnati, O.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year, or six months for \$1.50.

Portable Mills.

The portable mills made by Messrs. Munson Bros., Utica, N. Y., illustrations of which are shown on this page, possess some valuable features that should commend them to the attention of those needing machinery of this sort.

Among other advantages resulting from their mode of construction may be mentioned the fact that the runner adjusts itself to the stone so that the parallelism of the faces of the two stones may be preserved as the stone rotates. This arrangement, the



FIG. 1.—PORTABLE MILL.

having of the apex of the spindle in line with the bearing surfaces of the arms of the driver, admits of a universal joint movement of the stone, an effect which cannot be attained in the ordinary arrangement.

This invention also enables the spindle to be always kept properly lubricated, as oil may be poured into the box at any time, and the oil within the box is retained therein in consequence of the perforations in the upper part of the collar. These perforations cause the oil, which may have a tendency to rise in the space between the tube and the collar, to pass the holes into the box, instead of passing over the top of tube which extends above the holes of perforations. This is an important feature in this invention, as it effectually prevents the escape of the oil from the box when the latter is not over-supplied.

While the manufacturers prefer making the under stone the runner, having it hung on a sensitive point or cockhead spindle, making it perfectly adjustable and automatic, they will use the old method of construction where it is desired.

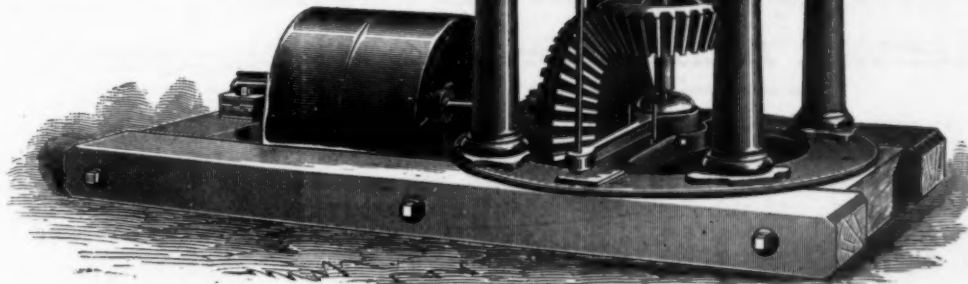


FIG. 2.—PORTABLE MILL.

In these mills the blocks of the under stone extend clear through to the back, and the backs being dressed off parallel with the face, they are much more easily kept in balance and their motion much more regular and positive.

As the grain enters the eye of the stone it drops on to a live surface, and this stone being in motion, radiates it over the face of the stone, thus feeding more accurately and more uniformly, making it an impossibility to choke or clog it in the eye.

Besides grain mills Messrs. Munson Bros. manufacture also mills for grinding starch, spice, plaster, cement, paint, marble dust, mineral pulp, &c., &c.

These mills are in use in some of the largest establishments in the country. They are not built to compete in price with low cost mills, but are made for service. Description and prices may be had from the manufacturers.

A Good Example.

Some months since a valued friend of the MANUFACTURERS' RECORD, in a communication of some length, gave to our readers a pertinent suggestion to this effect, that the Southern cities and States should unite in establishing centers of information in the great Northern cities, whereat capitalists and intending settlers might learn all they wished to know about the resources of the South. What he then advised North Carolina had already done for herself to some extent. In that State there is a department of agriculture with several practical bureaus, one of which, the bureau of immigration, has especial charge of all such things as our correspondent suggested. The commissioner of that bureau has since 1883 established a number of agencies in various parts of the Eastern and Middle States that have, it is said, been very efficient. Many people have been settled in the State through them, and considerably more than a million dollars of capital have, it is reported, been invested in North Carolina through their efforts. Late

county in the State can offer their lands, mines, quarries, forests and fisheries for sale, and to which all intending settlers and investors can resort for information. The majority of those who wish to live in the South cannot afford to spend the time and money necessary for an extensive investigation, nor can they learn, except by a long continued correspondence, all the facts they need to know before changing from a Northern to a Southern home. A bureau of this kind, if properly managed, is, therefore, of value to all parties in interest both as a convenience and also as an economic measure. In inaugurating this policy the State of North Carolina has set an example which other Southern States might follow with profit to all concerned.

The Cotton Tax.

We have never doubted but that at some period in the history of our country the cotton tax of \$75,000,000 collected illegally, and at the suggestion of passion and hatred, would be returned to the persons from whom it was wrongfully taken. It is now urged by many leading men and newspapers that the surplus now in the treasury affords a splendid opportunity to make the restitution of the cotton tax. The Supreme Court of the United States some years since held that the collection of the cotton tax was without authority of law and that the Government had no right to retain a tax so collected. And yet the Government, in the face of this decision, does retain the \$75-

robber tariff tax" and advocating the Blair Bill, our money would have been restored long ago. And this very class of demagogical statesmen of the South now clamor for this cotton tax to be returned to the States of the South for educational purposes. An unqualified outrage was perpetrated when the Federal Government, by violence, snatched this money from the people of the South and now the proposition is gravely made that our State governments shall become a party to this great wrong. How can it be ascertained how much of this cotton tax Alabama is entitled to unless we ascertain the amount taken from Alabama under the operations of the illegal law? To do this we must in a measure find out the names of the persons who paid the tax. We assert that if the cotton tax was wrongfully collected, as the Supreme Court has plainly said, then the money, with legal interest thereon, belongs to the men who paid the tax. The government of Alabama has no right to take my money for educational or any other purpose, unless the same burden is imposed on every other citizen in the State. We protest here now, in the name of justice against any such proposition. Rather than see Alabama made a party to such a wrong and injustice to her own citizens, we would prefer to see the cotton tax rust in the treasury of the government until time is no more. Let the government return the money to the State treasuries of the South in such proportion as is fair and just, then let each Southern State having this money give notice that proof would be received for the next three or five years as to the rightful owner, or the descendants of such. At the end of the limit all money belonging to this fund remaining in the State treasury unclaimed should revert to the State for general purposes.—Huntsville (Ala.) Mercury.

Mixing Rollers.

The accompanying cut shows the regular size of mixing rollers for prepared phosphates, &c., a very effective machine and in general use for many years. These rolls are 12 inches diameter by 36 inches long, set in a substantial wood frame, complete with screen, scrapers, hopper and tight and loose pulleys, ready for the belt; they occupy a floor space of only 7 by 4 feet and are 3



MIXING ROLLERS.

feet high. As much as 60 tons can be passed through in one day, dependent of course on condition of mixture. The manufacturers build other sizes, viz: Rollers 14x38 and 16x36 inches. These rollers are in use by nearly all phosphate manufacturers in and around Baltimore, and many others elsewhere. Further information can be had from the manufacturers, James Murray & Son, Nos. 103 to 108 East York street, near Light, Baltimore, Md.

ATTENTION is invited to the advertisement for a partner in a large wood-working establishment in the South.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD.

the past autumn the commissioner added to these by inducing Mr. F. E. McAllister, of 22 Dey street, New York, to add to his already extensive business the North Carolina Land & Immigration Bureau. Since September 1st that office has been open under the management of Captain Nick W. Schenck, formerly of Wilmington, and has, we are informed, done a large amount of business. That bureau is intended to be an agency through which the people of every

000,000 illegally collected from our people. And what, we ask, is the flimsy pretext given for not restoring this money? It is that the rightful owners cannot be found. Our answer is, that no effort has been made to find them. They are with us still, or their descendants are here and can be found when wanted. If it was a descendant in the remotest degree of a pensioner he could and would be easily found. But the fault in this matter is not so much with the Government as it is with timid and time-serving Congressmen from the South. If as much zeal had been manifested for the restoration of the cotton tax as some of our Congressmen have exhibited in denouncing "th

SHEFFIELD

◆ COLBERT COUNTY, ALA. ◆

The Iron Manufacturing Center of the South.

BEING at the *head of navigation*, and on the *south bank* of the Tennessee river, Sheffield is the *natural outlet* for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best *distributing point* over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. *Four railroads* certain, and several others assured. *Principal shops of Memphis & Charleston Railroad* will be erected here pursuant to written contract. These will employ between *four hundred and five hundred mechanics*, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

◆ Five Blast Furnaces Now Under Construction, ◆

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that *iron can be manufactured more cheaply* at Sheffield than at Birmingham, and its *river transportation facilities* will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class semi-weekly newspaper, printed by steam, is regularly issued. Furniture Factory, Bottling Works, Bakery, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Contracts have been made for the early erection of Electric Light Works, Paint Works, Agricultural Implement and Machine Works and Cotton Compress. Large Stove Works, Machine Shops, additional Iron Blast Furnaces, an extensive Charcoal and Chemical Plant, a large Rolling Mill and other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of *push and energy*. No "Old Fogy" element here.

No better point for *profitable investment*.

◆ Sites for Manufacturing Enterprises, ◆

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; now, (August 21st, 1887,) by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for *fluxing iron* in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of *brown hematite iron ore* within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the *Warrior Coal Fields*, which abound in first-class *coking, steam, gas and grate coal*. *Timber* is abundant and cheap.

The *Memphis & Charleston Railroad* and the *Sheffield & Birmingham Railroad* are now in operation into Sheffield. The *Louisville & Nashville Railroad Co.* is now extending its *Nashville, Florence and Sheffield* division, which will be completed to Sheffield before the close of the year 1887. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the *best combined river and railroad transportation center* in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. *More are needed.* For further information address

ALFRED H. MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

Tuskaloosa, Ala.

* ALABAMA'S NATURAL PITTSBURGH. *

A Railroad and River Town of 6,000 Inhabitants, in the Coal, Iron and Timber District.

Healthful Location. Salubrious Climate. School Facilities Unequaled by any other town in the South.

+ SITUATED ON +

Queen & Crescent

— TRUNK LINE, —

IN THE

Warrior Coal Field

AND ON THE

WARRIOR RIVER.

Only Navigable River touching the

Alabama Mineral Field.

Eight Months Navigation. Being Surveyed
now to be opened all the year round.

All Water Navigation to

❖ **MOBILE** ❖

AND THE

Entire Gulf and Atlantic Coasts.

THE

Tuskaloosa Northern Railroad

Is now under construction into the

MINERAL and TIMBER FIELDS.

THE

Macon & Tuskaloosa Railroad

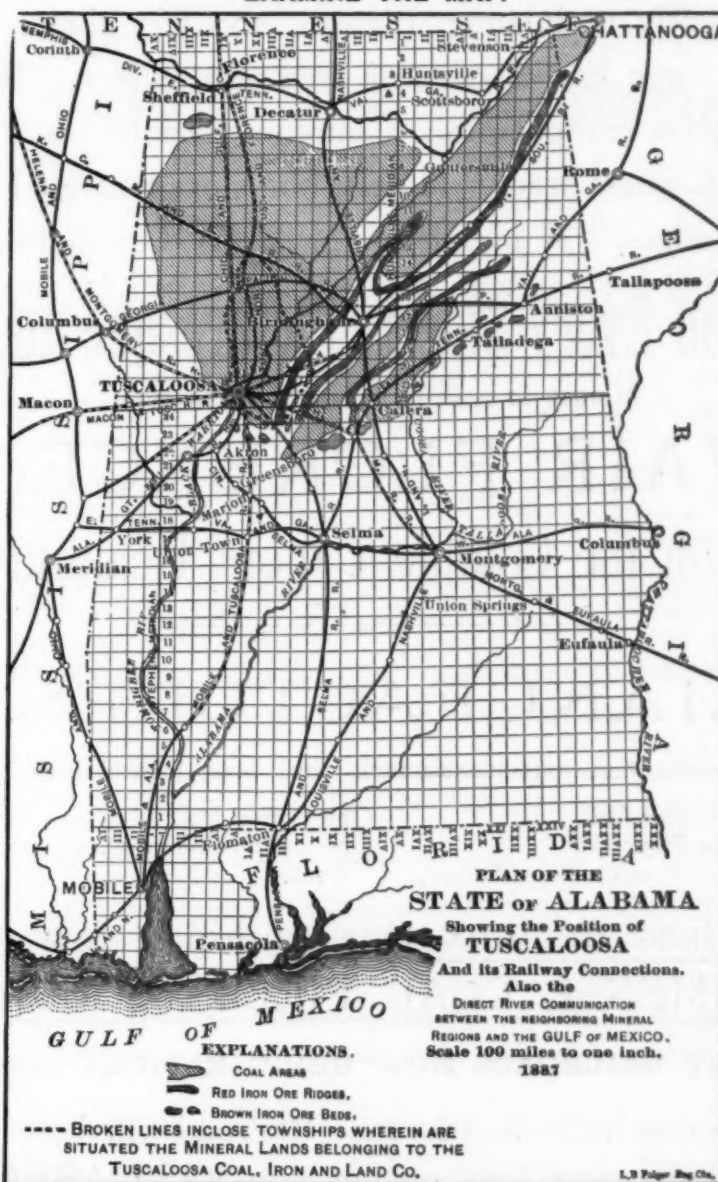
Will soon be building into the

COTTON REGION OF MISSISSIPPI.

Fine Farming Region

Around and Below the City.

"EXAMINE THE MAP."



Superior Inducements

AND

+ ADVANTAGES +

TO ALL

Manufactories Consuming

**WOOD,
IRON,
COTTON.**

FINE COOKING COAL

In workable veins near city, fully tested.

◀ **The Fire Clay** ▶

Existing in inexhaustible quantities, has been
practically tested and pronounced

The Best yet Discovered in the South.

Street Car and Dummy Lines

NOW BUILDING.

↔ **Water Works and Electric Lights** ↔

TO BE PUT IN AT ONCE.

COTTON MILL

In Successful Operation.

ALSO

LARGE BRICK WORKS

COTTON-SEED OIL MILL, &c.

Manufacturers Seeking Locations in the South have here

THE GOLDEN OPPORTUNITY.

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

— ROOM FOR ALL —

THE Tuskaloosa Coal, Iron & Land Co.,

Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers
to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims.

An illustrated descriptive pamphlet sent free upon application to

W. C. JEMISON, President Tuskaloosa Coal, Iron & Land Co., TUSKALOOSA, ALA.

Florence, Ala.

County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.

SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

== FAIR FLORENCE. ==

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces.	One Saw Mill,	One Cotton Mill,	Two Brick Machines and
One Rolling Mill,	One Flour Mill,	One Cotton Compress and Ice	Three Hand-Brick Yards.
Three Planing Mills,	One Wooden-Ware Factory.	Factory.	

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

GADSDEN, ALA.

Is situated on the West Bank of the COOSA RIVER, in the midst of the

RICHEST IRON AND TIMBER SECTION

IN THE FAVORED STATE OF ALABAMA.

➤ The Gadsden Land and Improvement Company ➤

Own large tract of Eligibly Located Residence Property in the Most Desirable Part of the City, and have fine location on river and railroad for

MANUFACTURING ESTABLISHMENTS,

And are offering great inducements to manufacturers to locate their plants in this *FAVORED LOCALITY*. No place in the South has such *Wonderful Advantages*. Situated in the midst of the *RICHEST IRON SECTION* in the STATE, at the foot of Lookout Mountain on the banks of a Navigable River, (*THE BEAUTIFUL COOSA*), surrounded by Forests of the Finest Timber on the Continent, with Fine Building and Fire Clay, and the *FINEST BUILDING STONE* all around us, with

Uninterrupted Health, and the Purest and Best Water and Finest Drainage of any City in the State,

Gadsden should become the Greatest Manufacturing Center of Alabama.

THE Alabama Great Southern, Rome & Decatur, Tennessee & Coosa, Anniston & Cincinnati Railroads, with the ever-flowing Coosa navigable the year round, gives us as *FINE TRANSPORTATION FACILITIES* as any other city enjoys.

We now have Railroad Car Works, Furnaces, Foundry and Machine Works, Saw Mills, Sash, Door and Blind Factory, Furniture Factory, Ice Factory, Paint Mills, Grist and Flouring Mills, Cotton Ginnery, Fine System of Water Works, Electric Lights, Telephone Communication over City, and also to neighboring cities Atlanta and Rome, Ga.

WE WANT Rolling Mills, Bridge and Bolt Works, Cotton Factories, Woolen Mills, Furniture Factories, in fact all kinds of Factories, even Coffin Factories, (but we want to ship the Coffins to some of the other booming cities.)

Liberal Grants of Land will be made by THE GADSDEN LAND AND IMPROVEMENT CO. to any of the above-named industries.

FOR FURTHER PARTICULARS ADDRESS

M. L. FOSTER, Sec. & Treas.

The Gadsden Land and Improvement Co., ✦ Gadsden, Ala.

POST-OFFICE BOX 145.

ANNISTON, ALA.

"The Model City of the South."

THERE is no healthier or more charming place of residence in America than Anniston; built on the slope of one of the highest of the chain of the Blue Ridge in Alabama, it commands scenery that is unapproachable in the State. Nature could not have formed a more beautiful place for man to build a city or given greater natural advantages. The natural drainage is most thorough and complete, while in addition the city is preparing a system of underground sewerage. *A more delightful and invigorating climate cannot be found anywhere: mild in winter, cool in summer, a thousand feet above the Gulf, with the high and broken chain, range after range in the east, Blue Mountain in the north, Coldwater Mountain in the southwest, make Anniston the coolest, healthiest and most attractive of any city in the South.* It has the richest agricultural country surrounding and tributary to it in the State, to support a manufacturing and mercantile population. The mountain sides will grow the grape and every kind of large and small fruit to perfection, and the valleys every product of diversified farming. *It is in the heart of the richest mineral district of the South, and commands the great fields of brown hematite ores on which the great and successful manufacture of iron must in the end depend for quality and profit in every branch of most skillful and best manufactures of iron and steel.* It has tributary to it the best and most extensive pine forests in North Alabama, that are reached by roads owned and controlled by Anniston citizens, while it has secured to its industries the very best coal mines and coking coal in Alabama. There is no city in America, in proportion to population, that has the manufactures of Anniston, or employs as many working men, or does a larger mercantile business. The industries already in full and profitable operation in Anniston are the **two Woodstock Furnaces** producing six hundred tons of Standard Car Wheel and Malleable Iron per week, and the **two Clifton Furnaces**, tributary to Anniston, producing nearly as much more. **The Car Works** are fully employed turning out forty cars per week, and are introducing new machinery and larger engines to increase their capacity to twenty cars per day. **The Rolling Mill and Car Wheel Foundry and Steam Forge** are among the largest in the South, of a capacity of two hundred wheels, a consumption of 120,000 pounds of metal per day, exclusive of the Rolling Mill and Steam Forge. These works are being enlarged to meet the increasing demands upon them. **The Cotton Factory** is one of the largest in the South, containing 11,700 spindles, and is running to its full capacity, while the foundry of **Murray & Stevenson**, and machine shop of **Pindar & Co.**, and planing mills of **Miller & Smith and Farrar & Co.** employ a large number of men and are crowded with work. The new industries that are now under way and provided for will within the next twelve months **Add Four Thousand Additional Working Men to Anniston's Population**. Two of the **Largest Iron Furnaces in the South**, capable of producing two thousand tons of iron per week, are progressing rapidly, and one of the **Largest and most complete Pipe Foundries in the world for the production of Gas and Water Pipe** is under construction,—it will employ nine hundred men.



NOBLE STREET—ANNISTON.

The Steel Blooming, for the production of Steel Blooms, is nearly completed, and the new **Fire-Brick Works of Taylor & Sons** are in operation. The **Ninety-Inch Morse Cotton Compress**, with its warehouses, has been completed, and is receiving cotton. Forty thousand bales, it is estimated, will be secured to Anniston from the territory that its system of railroads have opened up. The completion of the **Anniston & Cincinnati Railroad** during the present year, that will be owned and controlled by Anniston's citizens, opens up new territory and forms a **New and Shorter Grand Trunk Line to Cincinnati and the great Northwest, and to the Southwest via New Orleans and Shreveport.**

It is only the profits of business and labor that can add to the wealth of a community, add to or maintain the value of real estate, and add to the prosperity of its people. Having this in view, every industry and business in Anniston is established on a *profitable* basis. All its merchants are doing a large and profitable business, far larger than they prepared for or anticipated; it is the same with the manufacturers, while *not a dollar of debt has been created*, either by issue of a bond or placing of a mortgage on any of its old or new industries, leaving their earnings free from fixed charges that must be paid in times of depression as well as of prosperity. *To the investor, either in business, manufacturing or real estate, nowhere else are presented opportunities as safe, secure and certain as at Anniston, or where they can rest on as healthy and solid foundation.* It has trunk line railroad communication with all parts of the United States, and freight rates with the most favored of Southern cities. Two lines of railroads are owned and controlled in the interest of Anniston by its own citizens. *It has the best system of Water Works, with the purest well water from three hundred feet below the surface, drawn from white quartz sand and gravel, and distributed through the city, with a pressure of 100 pounds to the inch, from a reservoir always full, protecting the city against fire and giving it the lowest rate of insurance.* *The city is practically free from debt, and taxation limited to one-half of one per cent.* *The means for education are the very best.* Public Schools of a high grade are provided. One of the finest and best institutes for Young Ladies has been opened, and a College for Boys and Young Men, to which a School of Technology and Chemical Assay Laboratory have been added, is now nearly completed, and the best of teachers and professors secured for both. There are Churches for all denominations, and Hotel Accommodations that are not surpassed in Europe or America. **The ANNISTON INN** provides the quiet and comfort of the most luxurious home. *The streets are wide, macadamized, and rolled hard and smooth for pleasant drives.* **STREET CARS AND DUMMY LINES** are being built to different parts of the city, and the **ELECTRIC LIGHT** service enlarged and improved, leaving nothing undone to promote the comfort of its citizens and maintain and increase the value of their property and profits of their business.

The Anniston City Land Company, or the Bureau of Information, will give any information desired when applied to, and invite all wishing a charming place in which to live, to do business or to make profitable investments, to visit

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CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston.—It is reported that Mr. Jeter has been prospecting with a view to forming a company to manufacture coal gas.

Anniston.—The improvements being made to the fire-brick works of Charles Taylor & Sons, previously reported, will increase their daily capacity from 12,000 to 30,000 bricks.

Anniston.—The contract for the stone work of the union depot, previously reported, has been let to Mr. McMillan. J. W. Clardy, of Oxford, has received the contract for the brick work.

Anniston.—The Anniston Gas Light Co., referred to last week, has been organized with W. G. Ledbetter as president; O. H. Parker, vice-president, and E. H. Jennings, secretary and treasurer.

Avondale.—George W. Hess will establish a cracker factory and has purchased machinery.

Bessemer.—It is reported that the Bessemer & Columbus Railroad Co. are making surveys for their railroad previously reported.

Bessemer.—The Presbyterians will build a church.

Bessemer.—It is stated that the Louisville & Nashville Railroad Co. will probably build branch machine shops.

Bessemer.—H. G. Menmann will establish a soda water factory.

Birmingham.—The West Point Manufacturing Co. will move their foundry and machine shop from West Point, Ga., to Birmingham.

Birmingham.—A stock company is being organized to manufacture fire-proof paint. Robert Warnock can probably give information.

Birmingham.—The time for receiving the bids for building the school previously reported has been extended until November 15. Address the mayor.

Birmingham.—The Elyton Land Co. are building a shop for manufacturing sheet iron, gas tanks, &c. It will be operated by other parties.

Birmingham.—James C. Long, county superintendent, will receive until November 18 proposals for grading and macadamizing 10 miles of road.

Birmingham.—Wood, Paget & Williams have received the contract to build a church to cost \$8,000.

Birmingham.—The Louisville & Nashville Railroad Co. will erect a two-story office building.

Brewton.—A machine shop and foundry are to be erected.

Brewton.—R. G. Peters, of Manistee, Mich., and others have purchased the lumber mill of Poley & Flack and will greatly enlarge it.

Brundidge.—Isaac Andress has purchased machinery to start a brick-yard.

Decatur.—S. E. Eldridge, of Dwight, Ill., and George E. Oaks, of Buffalo, N. Y., contemplate starting a plumbing, gas fitting and machine repair establishment.

Decatur.—A large manufactory will shortly be moved to Decatur.

Ernest.—A saw mill is being erected by Buck & Preston.

Florence.—A company is being formed to erect the 10-ton ice factory and cold storage warehouse previously mentioned. The Florence Land, Mining & Manufacturing Co. can probably give information.

Florence.—A cotton factory and a spoke and handle factory are to be erected. The Florence Land, Mining & Manufacturing Co. can give particulars.

Florence.—The North Alabama Furnace, Foundry & Land Co., previously reported as to build three furnaces, have the privilege of substituting a steel plant or rolling mill for two of the furnaces, which they will probably do.

Florence.—The brewery previously reported as to be erected will be built by Cincinnati (Ohio) parties. They will probably begin work soon. The Florence Land, Mining & Manufacturing Co. can give information.

Florence.—J. W. Schwartz will establish a ship-yard.

Fort Payne.—The name of the company previously reported as to be formed to erect a saw mill is the Fort Payne Milling & Lumber Co. The capital stock is \$5,000. W. H. H. Minst is president. The mill will have a daily capacity of 10 M feet.

Gadsden.—There is talk of a stove foundry being established. If anything is done the Gadsden Land & Improvement Co. can give information.

Gadsden.—Parties from Massachusetts have been prospecting with a view to locating a cotton factory. If anything is done the Gadsden Land & Improvement Co. can give particulars.

Hayneville.—J. P. Streety & Co. have erected a mill and gin.

Helena.—The Helena coal mines, referred to last week, are being reopened by the Eureka Co., of Oxmoor.

Huntsville.—A hub, spoke and handle factory will probably be moved from Tennessee to Huntsville.

Huntsville.—It is rumored that a large cotton factory will be moved to Huntsville from Manchester, Eng. If anything is done B. P. Hunt can probably give information.

Jacksonville.—The Jacksonville Mining & Manufacturing Co. has been incorporated with a capital stock of \$1,500,000.

Jacksonville.—J. A. Gaboury and others have formed the Jacksonville Hotel Co. to build the hotel previously reported. The cost, it is said, will be \$30,000.

Mobile.—The Spring Hill Street Railroad Co. have purchased 800 tons of steel rails for their road, and will use dummies.

Mobile.—W. T. Abrams is rebuilding his gin reported last week as burned.

Montgomery.—The Alabama Land, Loan & Improvement Co. is being organized. Knabe & Scott can give information.

Montgomery.—The Montgomery Real Estate Co. have prepared plans for their large seven-story building, previously reported, and will shortly advertise for bids.

Odenville.—James L. Harden has purchased machinery to erect a saw mill.

Roanoke.—It is stated that the East Alabama Railway Co., previously reported as extending their railroad, will at once build it through to Anniston.

Talladega.—R. A. Mosely, Jr., and associates, reported last week as to form a company to manufacture jugs, will manufacture all kinds of pottery ware also.

Warrior Station.—The Watts Coal & Iron Co. will at once rebuild their machinery, trestling, dumps, &c., reported last week as burned.

ARKANSAS.

Atkins.—Weaver & Son will rebuild their carriage and wagon factory and planing mill, previously reported as burned. They have not yet purchased machinery.

Bear.—The Pioneer Smelting Co. have leased and will remodel the Smith smelter.

Bear.—Prof. Waitz will erect amalgamating works, and has ordered machinery.

Goldman.—The Highland Lumber Co., of Cincinnati, O., are erecting a saw mill five miles from Goldman.

Linwood.—W. M. Ware will rebuild his gin reported last week as burned.

Little Rock.—Z. Ward will build a new wall at the reservoir at a cost of \$6,500.

Marianna.—The contract has been awarded for building water works. B. M. Barrington can probably give information.

Paragould.—H. W. Glasscock has sold land to parties who will build mills.

Walnut Ridge.—W. M. Ponder has erected a saw mill with a daily capacity of 30 M feet.

FLORIDA.

Bloomfield.—William D. Mendenhall will build a tram road about three-quarters of a mile long.

Glen St. Mary.—W. L. Horne has erected the saw mill lately reported.

Green Cove Springs.—The Green Cove Brush Electric Co. has, it is stated, been formed to erect the electric light plant recently mentioned as projected.

Key West.—A sewerage system is contemplated. The mayor can give information.

Live Oak.—It is reported that a starch factory will be established. Joseph H. Ruff, Branford, can give information.

Marianna.—The Chipola Hotel Co. have let the contract to build their hotel, previously reported, to Mr. Hussey, of Orlando.

Millview.—J. W. Babcock, of Bay City, Mich., and others, reported last week as purchasing the plant of the Seminole Lumber Co., have bought 200,000 acres of pine lands in Baldwin county, Ala. They will move the mill to Bon Secour.

Orlando.—Mr. Macy has erected a mill for sawing and splitting wood.

Palatka.—Griffin & Parker have put new machinery in saw mill.

Palatka.—E. F. Steagall will make a proposition to erect an Edison electric light plant.

Port Orange.—A cigar factory will be established by John H. Wiese.

Sanford.—William Murray and P. Dougherty have started the Gate City Wagon Works.

St. Andrew's Bay.—A stock company is being formed to build a canal from Lake Chipola to East Bay.

Tallahassee.—John B. Hawkins is building a hotel.

GEORGIA.

Abbeville.—Jackson & Hall have moved their saw mill to Abbeville.

Argyle.—D. J. McDuffie will start a saw mill and has purchased machinery.

Atlanta.—J. W. English, president Chattanooga Brick Co., will receive proposals for grading, trestling and the masonry work of about 100 miles of the Chattanooga, Rome & Columbus Railroad.

Atlanta.—The Cooper Piano Manufacturing Co., lately reported as to start a factory, have purchased a site on Decatur street to erect a three-story factory.

Atlanta.—Boyd & Baxter, furniture manufacturers, will incorporate as the Boyd & Baxter Furniture Factory, with \$40,000 capital stock.

Banning.—The Hutcheson Manufacturing Co. are building a new warehouse.

Cedartown.—The Polk County Mining Co., capital stock \$5,000, has been incorporated by N. P. Gatillias and others.

Dahlonega.—S. S. Smith has purchased and will develop the Turkey Hill mine near Dahlonega.

Dalton.—John Black and F. G. Hardwick contemplate erecting the ice factory previously reported.

Griffin.—Osborn & Wolcotts are building an addition to their chair factory.

Loughridge.—Smith Tredwell has purchased the flour mill of Gregory & Hassler.

Macon.—H. D. Capers, of Adairsville, contemplates establishing a cotton gin factory.

Rome.—W. C. Huff, representing the Schayler Electric Light Co., of Hartford, Conn., is negotiating for the removal of the plant now at Atlanta to Rome.

Rome.—It is proposed to form a \$100,000 stock company to buy the Rome water works. J. W. Rounsaville can give information when anything is done.

KENTUCKY.

Ashland.—A saw and planing mill will be erected by C. H. Crowell.

Brandenburg.—The Rock Gas Co. will sink a well at once.

Carrollton.—Joseph A. Donaldson, Nat B. Lewis and John T. Lewis have chartered the Automatic Shaft Holder Co. to manufacture shaft holders, &c. The paid-in capital stock is \$3,000.

Hawesville.—William Hassen and R. E. Duncan are preparing to start a distillery 1½ miles from Hawesville.

Henderson.—The Henderson Street Railroad will be extended.

Louisville.—J. G. Barrett will erect five store buildings on Second street.

Nicholasville.—L. M. Jackson & Co. are building a mill.

LOUISIANA.

New Orleans.—O'Connor & Reynolds will erect architectural iron works.

New Orleans.—Thomas Killeen has asked for permit to erect a forge, iron foundry or blast furnace on Liberty street.

New Orleans.—The Columbia Co-operative Broom Manufacturing Co., 94 Tchoupitoulas street, will increase their capital stock to \$10,000.

MARYLAND.

Baltimore.—John Faust & Son are building a six-story brick building on German street between Eutaw and Paca streets. They will use it for a shoe factory.

Baltimore.—The Baltimore Co-operative Furniture Manufacturing Co. have purchased the flour mill of Seavers & Anderson and will put in \$10,000 of machinery to manufacture furniture.

Baltimore.—L. H. Robinson will erect 10 three-story houses on McCulloh street between Wilson and Laurens streets.

Baltimore.—A company has been formed to build a street railroad from North avenue and Division street to the Highland Park Hotel.

Baltimore.—H. C. Classen will erect 8 two-story houses on Hanover street south of Barney street.

Baltimore.—John H. Barnes is erecting works to manufacture china ware, &c.

Deerwood.—Lyddane, Jones & Co. have erected a 100-barrel roller flour mill.

Salisbury.—Water works are to be constructed. The mayor can probably give information.

Snow Hill.—Collins, Vincent & Robins will erect an electric light plant of about 400 lights capacity.

Washington, D. C.—A \$20,000 brick dwelling will be built at 1414 Massachusetts avenue, northwest, by George E. Lemon.

Washington, D. C.—Edward Tenyde will erect 14 brick dwellings on Delaware avenue to cost \$10,900.

Washington, D. C.—James G. Hill has prepared plans for a four-story residence to be built on K street by Francis B. Loring.

MISSISSIPPI.

Aberdeen.—The contract for furnishing the steam heating and ventilating apparatus for the courthouse and postoffice has been awarded to Bartlett, Hayward & Co., of Baltimore, Md., at \$3,500.

Amory.—The Kansas City, Memphis & Birmingham Railroad Co. will build a hotel. Harry Stone, Birmingham, can give particulars.

Beulah.—Mrs. L. M. Scott will rebuild her gin lately burned.

Biloxi.—The Knights of Labor will build a canning factory.

Cleveland.—The Renovo Land, Lumber & Shingle Co. (office, 19 Madison street, Memphis, Tenn.) are building a lumber mill. The daily capacity will be 50 M feet of lumber and 100 M shingles.

Columbus.—A. S. Mullins has purchased machinery to start a saw mill.

Crystal Springs.—A stock company is being formed to erect a canning factory.

Louisville.—The time for receiving bids for erecting the three-story brick school building, previously reported, has been extended until January 5, 1888. Address R. E. Moore.

Scranton.—The Louisville & Nashville Railroad Co., (office, Louisville, Ky.) will probably build a branch road from the New Orleans & Mobile Railroad at Moss Point, five miles.

Vicksburg.—D. N. Hebron will rebuild his gin previously mentioned as burned. The cost will be about \$2,000.

Winterville.—Henry T. Ivey is rebuilding his gin lately mentioned as burned.

NORTH CAROLINA.

Asheville.—W. H. Inloes has opened a manganese ore mine and will sell to E. S. Hutter, of Lynchburg, Va., who will develop.

Asheville.—Negotiations are being made for the establishment of a large tobacco factory. Several other manufactories are reported as contemplated.

Asheville.—The Asheville Ice & Coal Co. have purchased the necessary machinery for their ice factory previously mentioned.

Cabarrus County.—It is reported that \$40,000 has been subscribed to re-establish the old Rocky River Cotton Mills owned by Charles Black.

Charlotte.—The Farmers' Alliance are organizing to build a roller flour mill and a grain elevator.

Davidson County.—Operations are being resumed at the Silver Hill Mine.

Fayetteville.—The Hope Manufacturing Co. are enlarging their cotton factory by an addition 50x175 feet, and will put in additional machinery.

Fayetteville.—The woolen factory reported last week as to be started about January 1 will be established by H. G. Hall, of Shelby. He has purchased machinery.

Fayetteville.—I. W. Durham will move his marble yard to Fayetteville.

Lexington.—Thomas North has purchased some flour mill machinery.

Marion.—The Marion Bullion Co. contemplate erecting a 12-stamp mill and other machinery.

Montgomery County.—The Ohio parties who lately purchased the Grenman Mine are preparing to develop it.

New Berne.—A saw and planing mill is being erected by H. W. Steinhilper.

Polkville.—De Priest & Colton Bros., whose saw and grist mill, shingle machine and gin are reported in this issue as burned, are rebuilding.

Raleigh.—Edwards & Broughton have put \$3,500 of new machinery in their printing establishment.

Smithville.—The Consolidated Land & Lumber & Transportation Co., lately reported as chartered, will build several lumber mills and tram railroads. Thorndike Saunders, 170 Broadway, New York, is president of the company.

Statesville.—The Statesville Agricultural Implement Manufacturing Co., reported last week, have secured a site for their factory and have appointed J. A. Davis and J. M. Overcash a committee to negotiate for the construction of buildings.

Tyra.—H. B. Tilden will erect the stamp mill at the Monroe gold mine, lately reported. He contemplates developing other mineral properties.

Waynesville.—Capitalists are negotiating for large tracts of timber lands with a view to developing.

SOUTH CAROLINA.

Blackville.—Michael Brown has purchased the Blackville & Barnwell Railroad for \$70,000.

Columbia.—The Bolton Transportation Co., capital stock \$18,000, has been incorporated by David Roberts, of Charleston, and others.

Enoree.—Arthur B. Rose, of Charleston, previously reported as to build a cotton factory at the Mountain Shoals, has, with T. A. Pelzer, W. A. Courtenay, W. E. Huger, W. M. Bird and others, of Charleston, incorporated the Enoree Manufacturing Co., capital stock \$400,000.

Greenville.—C. H. Lanneau will erect a mill to manufacture high grades of yarn. The main building will be 40x120 feet. The manufacture of plaids and gingham will probably be added afterwards.

Greenville.—Julius H. Howard has made a proposition to build water works, also to light the city with electric lights.

Vance.—D. T. Thompson will rebuild his gin lately reported as burned.

TENNESSEE.

Chattahoochee.—J. P. Mays will erect 4 three-story store buildings on Carter street.

Chattanooga.—Charles Delf, lately mentioned as to start a mattress factory, will, it is said, also manufacture furniture and coffins.

Chattanooga.—Negotiations are pending for the removal of a large paper mill from Holyoke, Mass., to Chattanooga.

Chattanooga.—The contract to build the 100 miles of the Chattanooga, Rome & Columbus Railroad, previously reported, has been let to the Chattahoochee Brick Co., of Atlanta, Ga. They are advertising to let sub-contracts.

Chattanooga.—The contract to build the two iron bridges lately mentioned has been let to the Union Iron Works Co. at \$2,100.

Chattanooga.—The Chattanooga Wagon Manufacturing Co., previously reported, have secured the Palmer Soap Factory building, and will soon put in their machinery.

Chattanooga.—R. B. Peebles has let the contract for the superstructure of his building, lately reported, to R. W. Andrews.

Chattanooga.—The Chattanooga & Suburban Street Railway Co., recently reported as chartered, will build an electrical railroad and have asked for permit.

Chattanooga.—The Dowling Furnace Co., previously reported, have organized with J. L. Clift as president; D. W. Hughes, secretary, and John Dowling, superintendent and general manager. They propose to begin work shortly on their furnace. The capacity will be at least 100 tons.

Chattanooga.—The Cravens Land Co. have organized with James R. Cravens as president; James P. McMillen, secretary and treasurer, and C. C. Anderson, manager. The company will, it is said, develop coal mines.

Chattanooga.—Mr. Wayne contemplates doubling the capacity of his lime works at the Tunnel.

Chattanooga.—M. F. Penfield is negotiating for the removal of a large manufacturing plant to Chattanooga.

Chattanooga.—The Central Elevator Co. have enlarged their capacity 100,000 bushels and put in some new machinery.

Cleveland.—It is rumored that a company is being formed to erect a cotton factory. If true the mayor can probably give information.

Cottage Grove.—R. H. Todd is rebuilding his saw mill and gin reported last week as burned.

Fullen's.—A sash and door factory will be built by Bargner Bros.

Gallatin.—Subscriptions are being received toward building a railroad to the Cumberland river.

Johnson City.—The Western North Carolina Railroad Co. (office, Raleigh, N. C.) and the East Tennessee, Virginia & Georgia Railroad Co. (office, Knoxville) will probably build a union depot.

Johnson City.—The Johnson City Furniture Co. have reorganized with George L. Buss as president, and increased their capital stock to \$30,000.

Johnson City.—Frank Stratton has purchased a site to build a planing mill.

Knoxville.—The City Mills Co. are enlarging their mills.

Knoxville.—Cawood & Co. have received the contract to build part of the, Knoxville Southern Railroad.

Morristown.—A bed spring factory is reported to be started.

Morristown.—Machinery is being purchased for a furniture and coffin factory.

Morristown.—A company is being formed to build a carriage and wagon factory.

Nashville.—Weakly & Warren, Atwell & Sneed, and Webb, Stevenson & Co. will each rebuild their large buildings burned last week.

Nashville.—The Nashville Lumber Co., reported last week as to move their plant to West Nashville, will erect another band saw mill.

Nashville.—The Enterprise Manufacturing Co. will be incorporated.

Obion.—Harris & Thornton have started a sausage factory.

Sumac.—Joseph Samuel has rebuilt his saw mill.

Tate Springs.—Mr. Thomilson is having plans prepared to build a hotel.

Troy.—Work is being commenced on the Troy & Tiptonville Railroad, previously reported.

Tullahoma.—J. V. Gray has been prospecting for a site for a bed spring factory.

TEXAS.

Austin.—C. M. Isherwood will start a cheese factory.

Burnet.—The Austin & Northwestern Railroad Co. will build the railroad to Marble Falls reported last week.

Burnet.—G. W. Briggs, of Bedford, Iowa, has been prospecting with a view, it is said, to starting an iron foundry.

Corsicana.—J. E. Whiteselle, reported last week as to add another dynamo to his electric light plant, will make other additions also.

Cross Roads.—It is reported that Bryan T. Barry, of Corsicana, is putting in a system of water works.

Dallas.—The Farmers' Alliance contemplate erecting a paper mill.

Dallas.—1,000 acres of kaolin lands near Dallas have been purchased by parties who contemplate establishing works to manufacture queensware, porcelain ware, &c.

Dallas.—It is rumored that another cotton factory is to be started.

Fort Worth.—J. A. Pierce, of Sulphur Springs, contemplates erecting a 75-roller flour mill near Fort Worth.

Gainesville.—Bell & Myers have contracted to sink an artesian well.

Galveston.—The city will soon advertise for proposals for building the new water works previously reported. J. D. Cook will superintend the improvements.

Galveston.—Plans, specifications and estimates for the building of the Sealy Hospital will be received until December 15 by W. H. Baldinger.

Greenville.—The city council will probably want new bids for building water works.

Houston.—The Southern Cotton Oil Co., of Philadelphia, Pa., are building a seed house 80x300 feet, and will put in steam machinery for handling seed.

Houston.—It is stated that Eckart Bros., of Bridgeport, Conn., will build a brewery.

Houston.—The ice factory reported last week will be erected by Henry Henke.

Houston.—The Houston Street Railway Co. have purchased materials to extend their lines.

Houston.—The Houston & Texas Central Railway Co. have, it is stated, lately spent about \$10,000 in improving their machine shops.

Houston.—Rice & Dunbar have lately established a creamery.

Palestine.—The city council have decided to erect a school building to cost \$25,000, previously reported.

Port Lavaca.—A hotel is to be built.

Victoria.—There are prospects of an electric light plant being erected.

VIRGINIA.

Alexandria.—The American Manufacturing & Publishing Co., capital stock \$250,000, has been incorporated to manufacture medicines, bags, boxes, publish papers, &c., with C. F. Markell as president; J. A. Williamson, vice-president, and J. W. Kaufman, secretary and treasurer.

Alleghany Station.—A distillery is being erected by John Cale.

Bellevue.—The parties reported last week as negotiating with A. M. Doyle, of Low Moor, for the development of the mica on his land near Bellevue, are Shepard & Lerner.

Big Stone Gap.—The Connellsville Coke & Iron Co., of Connellsville, Pa., will build coke ovens.

Lexington.—W. P. Maitland has started the manufacture of stove polish, cleansing powder, &c.

Lynchburg.—Noble E. Thompson is trying to organize a stock company to manufacture wagon brakes.

Lynchburg.—McCorkle, Bowman & Co. will start a pork packing establishment, and have ordered machinery. They will manufacture lard, sausage, &c.

Portsmouth.—The Portsmouth Street Railroad Co. have let the contract for a two-story stable, 85x125 feet, to William B. Minter.

Rappahannock Station.—Geo. H. Lewis & Son are refitting their flour mill with roller machinery.

Richmond.—The Gallego Mills contemplate adding a roller flour mill with a daily capacity of 300 barrels.

Roanoke.—A company has been formed to erect a 100-barrel roller flour mill. Edward Corbett, of Washington, D. C., has the contract to furnish the machinery.

Roanoke.—Proposals for building a church for the Methodists will be received until November 15 by G. L. Stephens.

Warrenton.—The First Colored Baptist Church will erect a new edifice.

WEST VIRGINIA.

Clifton.—B. J. Redmon, John A. Redmon, B. R. Stevenson and H. J. Morton, of Clifton, and E. S. Grant, of Middleport, Ohio, have chartered the Hampden Foundry & Machine Co to manufacture stoves, machine work, &c. The capital stock is \$10,000.

Davis.—H. G. Davis & Bro. are building more coke ovens. They have completed eighteen.

Grafton.—Water works are being agitated, and Henry S. Wilson has been appointed to prepare plans and estimates.

Ronceverte.—The Greenbrier Valley Dressed Meat Co., reported last week, will erect refrigerating machinery.

Terra Alta.—A saw mill will, it is stated, be erected. If true Levi May can probably give information.

Valley Falls.—John Bradshaw has lately erected a roller flour mill.

Wheeling.—The La Belle Pottery Co., previously reported, will build their pottery next spring. It will be five stories, 100x320 feet, and will have seven kilns.

BURNED.

Atkins, Ark.—The grist mill and gin of A. T. Embrey; loss \$5,000.

Birmingham, Ala.—The mattress factory of P. H. Doonan & Co.

Blackstone, Va.—The Virginia Tobacco Works; loss \$37,000.

Blossom Prairie, Texas.—The planing mill and gin of W. W. Coil.

Raleigh, N. C.—The flour mill, 13 miles from Raleigh, owned by M. W. Page, of Raleigh, and others.

Dover, Ark.—The saw mill of Forrest & Turner, 4½ miles from Dover, damaged by a boiler explosion.

Helms, Va.—The tobacco factory of Helms & Bro.

Judsonia, Ark.—The saw mill of W. Meadows; loss \$5,000.

Knoxville, Ga.—The saw mill of F. J. Matthews damaged by a boiler explosion.

Nashville, Tenn.—The Rock City Plating Works damaged \$1,000.

Oakhill, W. Va.—The flour mill of Duncan & Hill; loss \$4,000.

Owensboro, Ky.—The saw mill of Wade & Mills damaged by a boiler explosion.

Polkville, N. C.—The saw and grist mill, shingle machine and gin of De Priest & Calton Bros. They are rebuilding.

Reidsville, N. C.—The large tobacco factory of H. Sampson & Co.; loss \$70,000.

Sherman, Texas.—The grist mill and gin of Scott, McCowan & Co.

The gins of Hailes & Gayle in Montgomery county, Ala.; Henry Buckner, near Macon, Ga.; James Henry, Natchitoches, La.; George W. Kelly, 3 miles from Easley, S. C.; George Pickette, 6 miles from Greenville, S. C.; J. T. Manley and A. E. Futral, 5 miles from Griffin, Ga.; Murray & Wells, Kingston, Texas; White Bros., Jackson, Tenn.; P. L. Adkins, near Poplar Bluff, Ark.; Thomas Rowan, 6½ miles from Bryan, Texas; W. P. Ross, Okolona, Ark.; Blocker & Axford, Hull, Ala., and J. J. Wise, St. James street, New Orleans, La., have been burned.

BALTIMORE, MD., November 2, 1887.

Editor Manufacturers' Record:

We have removed from our previous location and are occupying Nos. 313 and 315 Smith's wharf. Our present buildings are twice as large as the one we have occupied hitherto, and we contemplate increasing our facilities to a large extent. Our name has been changed from the Ellicott Co., limited, to the Ellicott Machine Co., and Mr. Thomas Ellicott, late and for many years with Poole & Hunt, has become a member of our firm. THE ELlicOTT MACHINE CO.

MACHINERY WANTED.

[If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, &c.]

Brick Machinery.—Mackey & Smith, San Antonio, Texas, want to purchase brick machinery, with a daily capacity of 25,000 bricks, that will handle light clay and sand mixed.

Bridge.—The Stone river bridge committee, Nashville, Tenn., will advertise for bids for building a bridge. Justice Overton can give particulars.

Dummy Engines.—The Fort Worth City Co., Fort Worth, Texas, want to purchase one or two dummy engines, either new or second-hand.

Dumping Cars are wanted by the Barataria Canning Co., Biloxi, Miss.

Gun Lathes.—The secretary of the Navy Department, Washington, D. C., will receive until March, 1888, bids for furnishing and erecting sixteen 16-inch gun lathes.

Gun Lathes.—The secretary of the Navy Department, Washington, D. C., will receive until January, 1888, proposals for furnishing and erecting eleven 6-inch gun lathes and one slotter.

Iron Bridge.—William H. Shipley, 219 east Fayette street, Baltimore, Md., is receiving bids for building over the Patapsco river a wrought iron Pratt truss bridge 200 feet long.

Iron Bridges.—Proposals for building six iron bridges, 125 feet, 100 feet, 100 feet, 140 feet, 70 feet and 50 feet long, will be received until November 18 by the commissioners' court, Waxahachie, Texas.

Plow Handles.—Burr & Bailey, Wilmington, N. C., want to purchase plow handles in large quantities.

Steam Heating.—The Capitol Board, Raleigh, N. C., will receive proposals for putting steam heating apparatus in the Capitol and State Library and Supreme Court Building.

Bids Wanted for Building Iron Bridges.

WAXAHACHIE, TEX., Nov. 3, 1887.

Editor Manufacturers' Record:

The commissioners' court will receive until November 18 bids for the construction of six iron bridges of the following dimensions: 1st. Span 125 feet from water's surface; piers 35 feet, 30 inches in diameter; 12-foot roadway, 80 pounds capacity. 2d. Span 100 feet; piers 29 feet, 30 inches in diameter; 12-foot roadway, 80 pounds capacity. 3d. Span 100 feet; piers 20 feet, 30 inches in diameter; 12-foot roadway, 80 pounds capacity. 4th. Span 140 feet; piers 30 feet, 30 inches in diameter; 12-foot roadway, 80 pounds capacity. 5th. Span 70 feet; piers 24 feet, 30 inches in diameter; 12-foot roadway, 80 pounds capacity. 6th. Span 50 feet; piers 20 feet, 24 inches in diameter; 12-foot roadway, 80 pounds capacity. Solid foundation for piers must be made.

B. F. HAWKINS.

Will Rebuild Mills.

LITTLE ROCK, ARK., October 30, 1887.

Editor Manufacturers' Record:

My shingle mill, saw mill and planing mills that were destroyed by fire on the 22d inst. will very soon be rebuilt and in running order.

C. C. LOOMIS.

GAINESVILLE, GA., November 1, 1887.

Editor Manufacturers' Record:

We are replacing some old machinery in our match factory, which is considerably worn, with new. This will increase our capacity somewhat and very greatly improve the quality of our goods.

C. W. DU PRE.

Erecting Pottery and Terra Cotta Works.

LAKE BUTLER, FLA., October 31, 1887.

Editor Manufacturers' Record:

Vernon & Bird have a small pottery in operation at this place. York & Craig are just beginning to erect a large one, which will manufacture terra cotta and all classes of pottery ware now made in the United States; also all sizes of drainage tiles. These works will not be ready for business before about 10th of March next.

H. F. YORK.

To Start Broom Factory.

KNOXVILLE, TENN., October 31, 1887.

Editor Manufacturers' Record:

Mr. Fred E. Champion (brother of the undersigned) expects to start a broom factory in Chattanooga soon, but it has no connection at all with our broom factory here.

CHAS. T. CHAMPION,

President Champion Manufacturing Co.

Will Rebuild Saw Mill and Box Factory.

REIDSVILLE, N. C., November 1, 1887.

Editor Manufacturers' Record:

We will rebuild our box factory and saw mill and fixtures as before, only we will build it out of brick, 120x60 feet, two stories high.

J. H. WALKER & CO.

SHEFFIELD, ALA., November 5, 1887.

Editor Manufacturers' Record:

Our infant city on the blue Tennessee is growing every day. We will have during the year 1888 five new (150 tons each) iron furnaces, besides a number of other manufactories of different kinds. Work has been commenced on the cotton compress. Machinery for a grist and flouring mill, machine shop and stove manufactory has been ordered.

J. W. CARLIN.

HAWESVILLE, KY., November 3, 1887.

Editor Manufacturers' Record:

The Hawesville & Pellville (Ky.) Mineral Railway Co. was organized here on the 17th October, with D. L. Adair as president and Robt. Winn, secretary. The road will run from Hawesville to Pellville, and thence to a connection with the C. & O. near Hartford, Ky., about 45 miles along and inside the eastern edge of the Illinois coal fields. The minerals along the route are being subscribed as stock, of which we expect to control 150,000 to 200,000 acres, which will be mortgaged to secure the capital to build the road and develop the mines.

D. L. ADAIR, Prest.

NEW ORLEANS, LA., Oct. 29, 1887.

Editor Manufacturers' Record:

I am now erecting a cylinder of 6 foot diameter by 100 feet length for the purpose of treating our Mexican and Southern woods so as to make them useful for furniture purposes. At present their tendency to warp prevents the use of our most desirable woods. In the near future, but not at present, I intend erecting a band mill, the refuse lumber from which that is not merchantable will be made into furniture. T. H. SAMPSON.

WHEELING, W. VA., October 31, 1887.

Editor Manufacturers' Record:

We are building a new decorating kiln now, and will build in the spring a seven kiln pottery, 320 feet long by 100 feet wide, and five stories high, to be known as the La Belle Pottery Co. WHEELING POTTERY CO.

SPARTA, GA., November 3, 1887.

Editor Manufacturers' Record:

The contract to build the Agricultural and Mechanical College at Auburn, Ala., main building, was awarded me on the 27th October.

JAMES SMITH.

BLOOMFIELD, FLA., October 29, 1887.

Editor Manufacturers' Record:

Wm. D. Mendenhall is making arrangements to build a street line or tram car line from wharf on Lake Harris to Bloomfield, three-fourths of a mile.

P.

Brick Machinery Wanted.

SAN ANTONIO, TEXAS, Nov. 2, 1887.

Editor Manufacturers' Record:

I have just started a brick-yard, and work by hand at present. In the spring will put in a press with capacity of 25,000 per day. I want one that will handle light clay and sand mixed together in the soil. Our works are located 20 miles from San Antonio on the Aransas Pass & San Antonio Railroad, with side tract to kiln at Calaveras. The firm will be Mackey & Smith. We will also start a pottery and tile works. We have abundance of potters' clay at this same place, and will start this soon; firm, Mackey & Cassiano, of San Antonio. We have on our land good glass sand; also sand for flint glass; bank 20 feet thick. Will start a cotton gin at this point next year.

N. MACKEY.

Information Wanted.

FORT PAYNE, ALA., Oct. 31, 1887.

Editor Manufacturers' Record:

The Fort Payne Milling & Lumber Co. was organized here last week; capital stock \$5,000. W. H. H. Minst is president. The mill, capacity 10,000 feet per day, is now on the grounds and will be running in a few days. Where can we obtain information about the manufacture of paint from raw materials?

FORT PAYNE LAND & IMPROVEMENT CO.

Tin Mining in West Virginia.

GLENWOOD, W. VA., Nov. 3, 1887.

Editor Manufacturers' Record:

The Tin & Ore Mining, Smelting & Manufacturing Co. are putting up a large building to cover a double reverberatory furnace, engine, crusher and pulverizer, which will be in place inside of two weeks. The company are also sinking a shaft for extraction of tin stone. It will also be ready inside of two weeks. Careful analysis has proved that very pure tin exists here in larger per cent. than Cornwall, England. The company has about 20,000 acres land, rich in tin, iron, coal, silver, nickel and other valuable metals and minerals.

J. J. RIDDLE.

Contemplate Enlarging Plant.

PLAQUEMINE, LA., Nov. 5, 1887.

Editor Manufacturers' Record:

We contemplate enlarging our plant.

CYPRESS SHINGLE & LUMBER CO.

Will Rebuild Factory and Mill.

ATKINS, ARK., Nov. 1, 1887.

Editor Manufacturers' Record:

We will rebuild our carriage factory and planing mill. We have not placed our order for machinery.

WEAVER & SON.

Started Ink Factory.

ATLANTA, GA., Nov. 3, 1887.

Editor Manufacturers' Record:

We have started the first printing ink factory in the New South; also make all kinds of writing ink. Works are small at present, the enterprise in this section being somewhat experimental. Will enlarge as trade demands.

HODGE & EVANS.

CHARLESTON, W. VA., Nov. 3, 1887.

Editor Manufacturers' Record:

I have been awarded the contract for building the third ward school building. The contract price is \$35,000. There is quite a number of buildings under construction at the present time, including two fine churches.

M. M. RUSK.

SCOTLAND NECK, N. C., Nov. 5, 1887.

Editor Manufacturers' Record:

I received last night the contract to build the Scotland Neck extension for 8 miles. 15 miles more will be put under contract as soon as the survey is completed.

A. H. SMITH.

GLEN ST. MARY, FLA., Nov. 1, 1887.

Editor Manufacturers' Record:

Mr. W. L. Horne has erected a saw mill at this place.

J. E. COLB.

Will Erect a Spoke Factory.

WALNUT RIDGE, ARK., Oct. 31, 1887.
Editor Manufacturers' Record:
 We intend to erect a spoke factory in connection with our wagon works, and expect to put the same in just as soon as our fall trade is over with. Col. W. M. Ponder, of this place, has just completed his new 50 horse-power saw mill. He expects to cut 20,000 feet white lumber per day with the same.
 GEO. GRAFF & SON.

Will Erect Electric Light Plant.

JACKSONVILLE, FLA., Nov. 1, 1887.
Editor Manufacturers' Record:
 The Green Cove Brush Electric Co. will put in a 30-arc-light Brush plant.
 L. D. SNOOKS.

New Home for the "Age."

BIRMINGHAM, ALA., Nov. 1, 1887.
Editor Manufacturers' Record:
 The work has begun on new 3-story brick building, with iron front, for the Age. It will be completed about January 1, and then the Age will put in new Web perfecting press.
 CHAS. M. HAYES, Manager.

To Build Courthouse and Jail.

PINEVILLE, KY., Oct. 29, 1887.
Editor Manufacturers' Record:
 Our county will build a courthouse and jail at a cost of \$25,000.
 J. F. SLUSHER.

Enlarging Electric Light Plant.

CORSICANA, TEX., Oct. 31, 1887.
Editor Manufacturers' Record:
 Have added a 300-light incandescent machine, and will make other additions soon.
 J. E. WHITESIDE.

Building Slaughter-House.

RONCEVERTE, W. VA., Nov. 2, 1887.
Editor Manufacturers' Record:
 We have formed a company for slaughtering beeves, and are now erecting ice ponds and buildings.
 GEO. N. DAVIS.

NATCHEZ, MISS., Nov. 2, 1887.
Editor Manufacturers' Record:
 We will shortly erect a large building, 92 x 100 feet.
 E. DREYFUS.

LOW MOOR, VA., Nov. 2, 1887.
Editor Manufacturers' Record:

I am negotiating with Messrs. Shepard & Lerner, the former of Staunton, and the latter of the Lerner Manganese Co., near Lynchburg, Va., for the development of the mica mine on my farm near Bellevue, Bedford county, Va. From examinations made they appear to be satisfied that the mineral is there of a paying quality and quantity.
 A. M. DOYLE.

TUSKALOOSA, ALA., Nov. 1, 1887.
Editor Manufacturers' Record:

The Tuskaloosa Northern Railroad is being rapidly pushed. The ending of the cotton picking season has made labor plentiful, and a large force is at work on the grade, which is progressing rapidly. Work on the piers of the bridge across the Warrior river on this line has commenced. This is the only really heavy job on this line between Tuskaloosa and the Kansas City & Birmingham Railroad, and its completion insures the completion of the road through the heart of the coal field from the water outlet for Alabama coal to the Gulf at Tuskaloosa. The Alabama Great Northwestern Railroad from Montgomery to Tuskaloosa is pushing its survey and operations, and the affairs of the Macon, Tuskaloosa, Birmingham & Natchez Railroad are in train. Tuskaloosa will soon, to all appearance, be a great railroad center.
 J. W. C.

To Build a \$30,000 Hotel.

JACKSONVILLE, ALA., Nov. 1, 1887.
Editor Manufacturers' Record:
 Mr. Gaboury, superintendent of the Mining & Manufacturing Co., of this place, is organizing a stock company to build a \$30,000 hotel. He has secured the requisite amount and the work will soon be commenced. Several enterprises of important dimensions are soon to be inaugurated.
 C. H. MONTGOMERY.

New Reservoir and Pumping Machinery.

COLUMBIA, S. C., Nov. 1, 1887.
Editor Manufacturers' Record:
 We will put up new reservoir and pump of one to one and a half million gallons capacity in twelve hours. We have also contracted with Gamewell Fire Alarm Co. to have one of their systems placed in our city. The contract has been signed, and hope to have same in operation by January, 1888.
 WM. J. CATHCART.

Cotton Factory Projected.

STATESVILLE, N. C., Nov. 3, 1887.
Editor Manufacturers' Record:
 Mr. G. F. Shepherd, president First National Bank, informs me that \$30,000 have been subscribed to a cotton factory, and that there will be no doubt of its establishment.
 N. B. GILLISPIE.

Ice Factory Contemplated.

DALTON, GA., Nov. 5, 1887.
Editor Manufacturers' Record:
 Parties are figuring on an ice factory for next season; represented by John Black and F. E. Hardwick.
 H. A. WRENCH.

Coal Mines Being Opened.

HELENA, ALA., Nov. 5, 1887.
Editor Manufacturers' Record:
 The Helena mines are being opened by Eureka Co., of Oxmoor.
 CENTRAL IRON WORKS.

COTTAGE GROVE, TENN., Nov. 2, 1887.
Editor Manufacturers' Record:
 My saw mill and gin were burned on the 15th of October, but I am rebuilding.
 R. H. TODD.

C. R. MAKEPEACE & CO.
ARCHITECTS and MILL ENGINEERS
 PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woollen Mills.

I OFFER FOR SALE

In Talladega county, Alabama, the best deposit of Brown Hematite Iron Ore in the State, and not only invite but challenge inspection. The property is located on a railroad and accessible. In addition I offer Coal, Timber and Manganese Lands; also one million dollars worth of property in and around Birmingham. I refer to all the banks in Mobile, Selma and Birmingham, Ala., and if required, will give other references.
M. G. HUDSON.
 Birmingham, Ala.

COPY OF ORDINANCE

Passed by the Council of the Town of West Point, Virginia, on the 21st day of April, 1879, and re-enacted and approved on the 22d day of March, 1887.

Be it ordained by the Council of the Town of West Point, Va., that any party or parties investing in property in this town for the purpose of conducting any enterprise, such as manufactories, packing houses, &c., and actually operating the same, they shall be exempt from all corporation taxes upon such property, and all machinery and improvements thereon, for the term of ten years from the purchase of such property.

It is also ordered that the Mayor is hereby instructed to advertise this ordinance in the "MANUFACTURERS' RECORD," a paper published in the City of Baltimore, Md.
 E. WILKINSON, Mayor.

MORRISTOWN,

The Metropolis of Upper East Tennessee.

IN BRIEF:

It has a population of 3,500—incorporated. It has more than doubled its population since 1880.

It has the finest courthouse and opera house in Upper East Tennessee.

It is the center of the richest and most extensive agricultural district in the State.

It has an elevation of 1,400 feet, and affords mountain views of surpassing beauty.

It has five commodious brick church edifices and two good brick school buildings.

It does the largest retail and wholesale business of any city in Upper East Tennessee.

It offers more and better opportunities for paying business enterprises than any city in the South.

It has hundreds of thousands of acres of unexcelled forests of merchantable timbers accessible to it.

It has the finest climate in the world, an abundance of pure spring water, and is noted for its healthfulness.

It is building more business houses and private residences in proportion to its population than any city in the State.

It is surrounded with iron and zinc mines and quarries of gray and variegated marbles of incalculable extent and value.

Its land companies and building association place desirable homes within reach of men of small means as well as large.

It is the commercial, manufacturing and railway center of Upper East Tennessee, having immediately tributary to it nine of the wealthiest counties in East Tennessee and a large part of Western North Carolina.

It has railroad facilities equal to those of any point between Chattanooga and Lynchburg, and they will be increased in the next eighteen months by the building of the short line to the coal fields at Cumberland Gap.

It has a citizenship composed almost exclusively of native-born Americans, large numbers of whom are recent emigrants from New York, Connecticut, Pennsylvania, Ohio, Virginia, Indiana, Wisconsin and other States.

It has two banking institutions, extensive stove works, a manufactory of agricultural implements, a large tannery, three lumber mills, the largest commercial flouring mill in East Tennessee, two marble works, a carriage and wagon factory, and many industrial establishments of lesser note.

ROBERT L. GANT,

President Business Men's Association.

Farm, Mineral

AND

Timber Lands.

Parties desiring to obtain **Fine City Property** in a growing manufacturing center, and **Truck Farms** of superior excellence in close proximity to the markets of the country, and **Mineral and Timber Lands** of great value, will do well to consult Messrs. A. B. Whiteaker & Co., of Bristol, Tenn. The **Mineral and Timber Lands** controlled by us are within a radius of fifty miles of Bristol, and are pronounced by experts to be the most valuable in the sections of East Tennessee and Southwest Virginia. The **Timber Lands** are of virgin growth and in close proximity to the railroads. The **Mineral Lands** are the richest in this section of the South. **Capitalists and Prospective Settlers**, as well as **Home Seekers**, will do well to consult us regarding our lands, which we offer at the most reasonable prices. We will be glad to furnish any or all kind of information regarding lands in this section of the State. Address

A. B. WHITEAKER & CO.
 BRISTOL, TENN.

D. W. K. PEACOCK,
Real Estate Agent,

CARTERSVILLE, GA.

Minerals a Specialty.
 Refers to THE HOWARD BANK, Cartersville, Ga.
 I. W. RANKIN, Atlanta, Ga.

BYRD CREEK IRON CO., of Virginia.

This Company is now fully organized and offers a limited amount of their Capital Stock to investors on advantageous terms. Investment well secured. Address, for information and prospectus,

General H. C. SICKEL,
 729 Walnut St., Phila., Pa.

Manufacturers' Bureau, of Fort Smith, Ark.

Invite correspondence and propositions from manufacturers with a view to locating at Fort Smith. Fort Smith is the center of an immense semi-anthracite coal, lumber, iron and cotton region, with railroad facilities giving close connections with the markets of Kansas, Texas, Missouri, Indian Territory and Arkansas. Population in 1880, 7,500; in 1886, 14,000; in September, 1887, 18,000.

FOR SALE.

20,000 ACRES

Timber, Coal & Iron Lands

LOCATED IN

FRANKLIN COUNTY, TENN.,

Near the North Alabama State line, and on the main trunk of the Nashville & Chattanooga Railroad, 100 miles from Nashville, 12 miles from Stevenson and junction of this railroad with the Memphis & Charleston, 27 miles from South Pittsburg, 60 miles from Chattanooga, 10 miles from Cowen, 15 miles from Sewanee, the University of the South.

These lands are surrounded on all sides by iron furnaces and large coal and iron consuming centers. The location is in the midst of the Cumberland Mountains; good average soil, splendid scenery, pure air, good health, and every variety of mineral waters. The forest consists of Pine, Poplar, Oak, Ash, Chestnut, Hickory, Cherry, Black Walnut, and generally every variety of hardwood common to this country, very large, valuable, and in great quantity. The iron ores of brown hematite, assaying above 50 per cent. of pure metal, are apparently inexhaustible in quantity. The coal consists of three separate and distinct measures: 1st vein, top 4½ to 5 feet, hard grate; 2d vein or middle, 3½ to 4 feet, good gas, coking and grate; the 3d vein and lower, 8 to 4 feet, and superior to either of the above, approximating the anthracite. These coals are seen cropping out all over these lands, and in places much thicker, but have not been developed sufficiently to state specifically their great extent or valuable properties, except to say that the quality is apparently everything desired, and the quantity practically unlimited.

The present railroad divides this land in nearly equal parts, and the coal can be reached by a branch road within 1½ miles, and no obstructions in the way. Splendid sites for furnaces or manufacturing purposes. Stone in great variety, good quality and of great value. The exact acreage to be ascertained by a new survey or measurement. This land can be divided into about equal parts, giving to each half all the minerals, timber and facilities needed, and will be sold and divided in this way if desired. The present owners will take and reserve one quarter interest if allowed to do so. This property has only to be examined by an expert and its present and prospective money value approximated. Title perfect. Terms, one-fourth cash, balance in one and two years, and price very low. For further information and particulars address

NASHVILLE,

CARE MANUFACTURERS' RECORD,

BALTIMORE, MD.

FOR SALE.

30,000 ACRES

Timber & Iron Lands,

LOCATED IN

Perry County, Tenn.,

On the waters of the Tennessee and Buffalo rivers, about sixty miles west from Nashville, and on the projected Midland and Ohio Valley Railroads. The Midland is now under contract from Memphis to the Tennessee river, 135 miles, and will in the next twelve months reach Nashville. The land is of average soil and quality. The timber is mainly Poplar, White, Black and Mountain Oak, Ash, Hickory, and in fact all varieties of hardwood. The iron ores of brown hematite are found in large abundance all over these lands. Both the timber and iron can be reduced on the spot and shipped in every direction by water or rail, or in the raw state to large consumptive markets. Title perfect. Terms, one-third cash, balance in one and two years. The exact acreage to be ascertained by a new survey or measurement. Thorough examinations solicited. Address

NASHVILLE,

CARE MANUFACTURERS' RECORD,

BALTIMORE, MD.

Arkansas Mining News

BEAR, ARK., November 5, 1887.

Editor Manufacturers' Record:

Mines are looking up considerable here. Professor R. R. Waitz, inventor of the electro-amalgamating process, has broken ground and commenced the construction of his plant and expects to be in running order in thirty days, as all his machinery left St. Louis on the 1st for Bear. He is not making an experiment as so many have, but means actual business, as he has already treated this class of ores with remarkable success. He has disposed of the State right to Fulton Bros., of this place, who are strictly business men and who are noted for their careful investigative turn. M. Moscovits commenced a new store building this week to be 30 by 60 feet, 2 stories. The Smith smelter is under lease to the Pioneer Smelting Co., and will be remodeled and started in short order. The Lost Louisiana Co. have contracted to deliver 100 tons of ore to the Pioneer Smelting Co. CORTEZ.

Will Build Another Saw Mill.

NASHVILLE, TENN., Nov. 7, 1887.

Editor Manufacturers' Record:

The Nashville Lumber Co. has decided to move its entire plant to the manufacturing town of West Nashville, 3 miles below and on the Cumberland river, having secured an excellent tract of fifteen acres of land having about 1,000 feet river front, and same on railroad, with private tracks through the premises. In addition to our present band saw mill and planing mill, we have purchased a new band mill with steam feed that will also be erected there, giving us a daily capacity of 65 M feet. Our place is now being platted by an engineer, and all buildings and tracks will be located with a view to doing the most work at minimum cost. Expect to fit up the most complete lumber manufacturing plant in the South. THEO. PLUMMER, Secretary.

Will Erect Electric Light Plant.

SNOW HILL, MD., Nov. 7, 1887.

Editor Manufacturers' Record:

We are going to put in an electric light plant of from 350 to 400 16-candle-power lights, to be run by a 40-horse engine.

COLLINS, VINCENT & ROBINS.

New Machinery.

JOHNSON CITY, TENN., Nov. 7, 1887.

Editor Manufacturers' Record:

We have increased capital some and added some new machinery.

JOHNSON CITY FURNITURE CO.

CHATTANOOGA, TENN., Nov. 7, 1887.

Editor Manufacturers' Record:

We have enlarged the capacity of our elevator 100,000 bushels, adding more bins, another elevator, a bran packer, and a corn sheller with capacity of shelling 1,000 bushels of corn per day. Our elevator project was entirely a new enterprise for this section of country, and has increased our business far beyond our expectations.

CENTRAL ELEVATOR CO.

JOHNSON CITY, TENN., Nov. 8, 1887.

Editor Manufacturers' Record:

Teegarten & Finney have found a very fine quality of ore. If they have the quantity they will erect furnaces and a steel plant and build a railroad to their mines. This place will be favorably considered. Frank Stratton has bought 4 acres at this place for a planing mill site. The planing mill is certain to be built. F. P. BAXTER.

VILLAGE MILLS, TEXAS, Nov. 5, 1887.

Editor Manufacturers' Record:

We will during the next month extend our logging railroad two miles.

VILLAGE MILLS CO.

Erecting Electric Light Plant.

DE LAND, FLA., Nov. 1, 1887.

Editor Manufacturers' Record:

The Southern Electric Light Co., Mr. A. G. Kingsbury, manager, are erecting at De Land, Fla., an arc and incandescent light plant for the De Land Electric Light & Power Co., of that place. It will be in operation in six weeks. A. G. KINGSBURY.

To Build Street Railway.

TUSKALOOSA, ALA., Nov. 1, 1887.

Editor Manufacturers' Record:

A street railway from this city to West End, 7½ miles, will be built at earliest possible time. J. G. BRADY.

Will Rebuild.

WARRIOR STATION, ALA., Nov. 5, 1887.

Editor Manufacturers' Record:

Our machinery was burned October 27. We will rebuild at once.

WATTS COAL & IRON CO.

Two More Manufactories for Houston.

HOUSTON, TEXAS, Nov. 4, 1887.

Editor Manufacturers' Record:

An ice factory will be built by Henry Henke, of Houston, and a brewery by Eckart Bros., Bridgeport, Conn.

J. L. NATSON.

Building Large Shoe Factory.

BALTIMORE, MD., Nov. 5, 1887.

Editor Manufacturers' Record:

We are building a six-story warehouse on German street, between Eutaw and Poca streets, and which we intend to occupy entirely as a shoe factory as soon as completed. J. FAUST & SON.

A \$100,000 Brewing Company.

NEW ORLEANS, LA., Oct. 31, 1887.

Editor Manufacturers' Record:

The Pelican Brewing Co. has been started, and we hope with success. The capital stock is \$100,000, and buildings will be erected shortly. ALBERT ERATH.

Building More Coke Ovens.

DAVIS, W. VA., Nov. 4, 1887.

Editor Manufacturers' Record:

We have 18 ovens completed, and we are continuing the work as fast as possible. The coke has proven an excellent quality, and we will build as long as there is a demand. H. G. DAVIS & BRO.

ASHLAND, KY., October 31, 1887.

Editor Manufacturers' Record:

We are investigating the feasibility of installing an electric light plant, and have not proceeded far enough as yet to enable us to say if it be erected or not.

E. M. ROBERTS.

ATLANTA, GA., Nov. 7, 1887.

Editor Manufacturers' Record:

D. F. McDuffie, Saussy, Ga., has purchased of Russell & Co. a 20-horse-power saw mill outfit, and will operate same at Argyle. T. W. Hasbin, Calhoun, Ga., lost his gin by fire. A. S. Mullins, Columbus, Miss., has purchased a 10-horse-power saw mill outfit. Jas. L. Harden, Odenville, Ala., has purchased of Russell & Co. one saw mill, and will operate same near Odenville. J. W. DUNN.

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, Nov. 7, 1887.

	BID.	ASKED.
Virginia 6's Consols.	47	47
Virginia 3-4 5 10-40's	35½	36
Virginia 3's, new.	35½	36
Virginia Consol Coupons	31	31
N. Carolina 4's Consols.	98	98
Wil. & Wel., Gold, 5's.	110½	110½
Atlanta & Char. 1st, 7's.	110½	110½
Atlanta & Char. Inco. 6's.	100	100
Col. & Green. 1st 6's.	101½	102
Col. & Green. 2d 6's.	74	75½
Va. Midland. 1st 6's.	112	112
Va. Midland. 2d 6's.	108	108
Va. Midland 5th 5's.	102	102
Char. & C. Aug. 1st 7's.	110½	110½
Ga. Pacific 1st, 6's.	106	106
Cape Fear & Y. Valley 1st 6's.	95½	95½
Silver Valley.	135	135
Baito. & N. Carolina.	50	50
North State (Balt.)	50	50

STEEL RAILS

COMPLETE OUT-FIT FOR
Logging, Mining and Plantation

RAIL AND TRAM ROADS.

Light Sections Rails and Spikes in stock.

Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.

HUMPHREYS & SAYCE,

OFFICE NO. 1 BROADWAY, N. Y.

BIDS WANTED.

The City Council of Thomasville asks for bids on the following:

2,500 lineal feet of 8 inch water pipe.

2,500 " " 6 " " "

2,500 " " 4 " " "

100 " " 3 " " "

Two 8 inch stop gates.

Five 6 " " "

Four 4 " " "

Two 3 " " "

20 double nozzle fire hydrants.

13 stop gate extension boxes.

T's suitable for connections at angles.

Bids will be received for twenty days for furnishing the above material and putting same in place, or for material or work separately. The town will do all excavating and filling. Address

A. F. PREVATT,

Chairman Water Works Committee,

Thomasville Ga.

IMPORTANT
To Wharf Owners.

THE PATENT PILING PROTECTOR CO., BRUNSWICK, GA., is prepared to protect piling from the Teredo and other Marine Pests in any Harbor in the United States, and will erect its plant, which is inexpensive, in any Harbor where a contract is offered, and prepare piling from the timber near at hand. The process is thoroughly effective, indestructible in salt water, and protection for ten years guaranteed. Is fully protected by letters patent. Has been tested for six years; is better than metal covering; as good and for piling in some respects better than creosoting; costs less than one-half as much as metal covering or creosoting. Circulars fully explaining process will be sent upon application. Correspondence solicited.

Address,

C. P. GOODYEAR, President,
BRUNSWICK, GEORGIAFOR SALE.
Corliss Beam Engine,
350 H. P.

Cylinder 28 inches, 73 inch stroke, balance wheel 18 feet diameter, with gear same size; was recently put in thorough repair, and is in A 1 order to-day. This is ONE opportunity in a thousand to buy a first-class engine at a great bargain, as the parties owning it have no use for it. It will bear the fullest investigation. Also a Corliss Horizontal Engine, 20x48, fly wheel 14 feet diameter, 25 inch face; has condenser and will develop 300 horse-power. Will be put in complete order and sold at a low price, as the concern has given up business. Also a Green Horizontal Automatic Engine, 90 horse power, 14x48, in complete order. The above are bargains, as they will be sold low.

L. CODFREY & CO.
PROVIDENCE, R. I.

For Sale.

A 100 horse-power Stationary Engine and two Stationary Boilers, together with fronta, grates, castings and trimmings. Said Engine and Boilers have been used, but have been thoroughly rebuilt, and are in A No. 1 order, and will be sold very low; or can attach a Mammoth Saw Mill and sell all low, and take part in good yellow pine lumber. Apply to

RICHMOND MACHINE WORKS.

RICHMOND, IND.

For Sale Cheap

One No. 4 Sturtevant Blower, with counter shaft; second hand.

One No. 1 Keystone Forge; second hand.

One No. 6 Buffalo Forge, with water tank for power; new.

Two Boiler Feed Pumps, suction 1 inch, and discharge 1½ inch.

One Power Boiler Punch, second hand; punch ¾ hole.

One Lawson Vertical Gas Engine, 3 horse power.

One Horizontal Steam Engine, 3 horse power; second hand.

One Vertical Steam Engine, 3 horse power; new.

One Vertical Steam Engine, 8 horse power; new.

One Vertical Steam Engine, 12 horse power; new.

One No. 6 Friedman Injector.

One Planer; second hand; 30 inch by 30 inch by 3 feet.

One Combined Engine and Boiler, 3 horse power; new.

One 40 to 60 horse Automatic Engine; new.

One 15 horse power Horizontal Engine and Boiler new.

A complete Laundry Outfit; used 3 months.

One Blake Steam Pump, 8-inch suction, 1½-inch discharge.

One Horizontal Tubular Boiler, 30 inches diameter x 16 feet, with 62-3 inch tubes; also 48-inch x 12 feet, with 54-3 inch tubes.

WM. C. CODD,

2010 and 2013 Aliceanna Street.

BALTIMORE, MD.

FOR SALE-MACHINERY.

No. 10 Bliss Press, same as new.

No. 3 Garvin Miller, same as new.

No. 1 Tapping Machine, same as new.

No. 5 Emery Grinder, same as new.

12-in. Double Table Shaping Machine, new.

1 26-in. Steptoe double geared Shaper, new.

1 15 in. Steptoe Crank Shaper, new.

10-in. Shaper, Boynton & Plummer, new.

1 14 in. x 3 ft. N. H. Planer, second-hand.

Planer, 24x4, second-hand.

Planer, 20x4, Lincoln, second-hand.

Planer, 24x8, Pond, new.

Planer, 24x8, Pond, new.

No. 1 Garvin 2-Spindle Drill, good order.

25-in. B. G. S. F. Upright Drill, new.

26-in. " " " " " "

30-in. " " " " " "

30-in. Upright Drill, B. G. S. F. " "

32-in. B. G. S. F. Drills, new.

36-in. B. G. S. F. Drills, new.

Engine Lathes, 24x6, new.

Engine Lathes, 28x6, new. (as new.)

Gage Turret Lathe, complete with slide rest, same

Gage Hand Lathe, excellent order.

Engine Lathes, 28x4, new. Engine Lathes, 28x6, new.

Engine Lathes, 28x8, new. (hand.)

1 Leonard & Clark Lathe, 16x8.

1 Engine Lathe, 16 in. x 7 ft., second-hand.

Engine Lathe, 23 in. x 12 ft., new.

Engine Lathe, 15 in. x 6 ft., B. G. S. F. Screw-Cutting.

Engine Lathe, 16 x 6 ft., power cross-feed, new.

Engine Lathe, 18 x 6 ft., power cross-feed and compound rest, new.

Engine Lathe, 20 in. x 8 ft., power cross-feed and compound rest, new. (hand.)

1 12-in. x 5 ft. B. G. Hand Lathe, with Chucks, second

6-in. Double Cut'g Off Machine, wood, Jennison & Co.

1 16-in. Wells Bolt Cutter.

1 16-in. Howard Bros. Bolt Cutter.

Key seating Machine, Howard.

Cold-Rolled Shafting, Hangers, Pulleys, &c.

Agents for I. W. Pond Machine Co. Planers;

Currier & Snyder Drills; Bickford Drill Co.;

McMahon & Co. Lathes; Fay & Scott Engine Lathes;

John Steptoe & Co. Shapers.

FRASER & A'CHER, 121 CHAMBERS STREET, N. Y.

Second-hand Machinery in Good Order.

FOR SALE CHEAP.

1 Engine Lathe. Good order.

1 Engine Lathe, 26 in. x 24 ft. Triple Geared.

1 " " 26 in. x 12 ft.

1 " " 36 in. x 7 ft. 1 Engine Lathe 18 in. x 8 ft.

1 " " 24 in. x 20 in. and 24 ft.

1 " " 24 in. x 12 ft. bed. Vifield.

1 " " 3 in. x 25 ft.

1 " " 24 in. x 12 x 16 ft.

1 " " 26 in. x 20 ft.

1 " " 28 in. x 20 and 12 ft.

1 each " 16 in. x 6 ft. and 10 ft.

6 " " 14 in. x 6 ft.

1 " " 19 in. x 5 ft.

4 " " 15 in. x 6 ft.

1 " " 11 in. x 4 ft. and 5 ft.

1 " " 10 in. x 16 ft. Foot power.

1 Axle Lathe. Bement & Son.

1 " " 18 in. x 16 in. x 3 ft. Pratt & Whitney.

1 " " 24 in. x 24 in. x 3 and 8 ft.

1 " " 30 in. x 30 in. x 7 ft.

1 Planer, 36 in. x 36 in. x 9 ft.

1 " " 34 in. x 28 in. x 11 ft.

1 Shaper, 6-in. stroke. 1 12-in. Shaper, two tables.

1 " " 10-in. stroke. Gould.

1 each 12, 15, 20 and 28 in. stroke.

1 17 in. stroke Shaper, heavy. Pond.

1 Crank Planer. 6 Lincoln Pat No. 2 Millers.

1 each 3 and 6 Spindle Gauge Drill.

1 each No. 1 and 2 Screw Machines. Wire Feed.

Pratt & Whitney. Good as new.

1 375-lb Drop Hammer. Beecher & Peck.

1 60-lb. Vertical Hammer.

1 No. 55 Ferracute Press. 1 Nut-Facing Machine.

10 Foot Presses, assorted. 8 Power Presses, assorted.

15 Punching and Shearing Machines, assorted.

5 Return Tubular Boilers, 35 H. P.

1 National Bolt Cutter, 1½ in. to 1 in.

1 Bolt Cutter, 1½ in. to 1 in. included. Wm. Sellers & Co.

1 each Nos. 2 & 3 Garvin Hand Millers. Good as new.

1 Horizontal Engine each 25 and 45 H.-P.

1 Slotter 13 in. stroke.

1 48 in. Boring and Turning Mill. Pond.

1 No. 2 Screw Machine. Plain. Browne & Sharpe.

1 Spindle Profiling Machine.

1 Horizontal Boring Machine, 26 in. x 6 ft.

1 6 H.-P. Baxter Engine. 1 Valve Miller.

1 No. 3 Stiles & Parker Press "A 1"

1 No. 34 Stiles & Parker Presses.

Also full line of New Machinery.

New York Agency TAYLOR MFG. CO., Engines,

Boilers, &c. Correspondence solicited.

PRENTISS TOOL AND SUPPLY CO.

P. O. Box 1216. No. 42 Day St., New York City.

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH 

AS A CITY OF Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last four months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.
The Louisville & Nashville Railway Car Works. Cost of Buildings, \$300,000.

Charcoal Company's plant, costing \$120,000.

A seventy-ton Charcoal Iron Furnace, costing \$190,000.

A one hundred-ton Blast Iron Furnace, costing \$225,000.

The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.

The American Oak Extract Company's plant, costing \$60,000.

Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.

Morse Cotton Compress plant, costing \$60,000.

Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.

Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.

The Decatur Street Railway Company.

The Telephone Company.

Brush Electric Light Company, cost \$10,000.

The Ironton Wheelbarrow Company, cost \$25,000.

Howland & Co's Water Works System, costing \$200,000.

Bleymeyer Artificial Ice Company, cost \$10,000.

Four Mammoth Brickyards.

Jones, Poley & Co's Lumber Yards.

The Hoosier Mills & Building Company.

The Gate City Sash & Door Company.

Arantz Bro's Mills and Lumber Yards.

Grant & Co's Furniture Factory.

Southern Lumber Company.

H. S. Freeman's Mills and Lumber Yards.

The Alabama Farmer's Friend Fence Machine Company.

The Decatur Artificial Stone Company.

Decatur Chain and Architectural Iron Works, capital \$100,000.

Natural Gas Company, capital \$200,000.

First National Bank, capital \$100,000.

The Exchange Bank of Decatur, capital \$100,000.

Merchants' Insurance Company, capital \$100,000.

Decatur Building Association, capital \$300,000.

Decatur Building Company, capital \$1,000,000.

Buchheit's Bottling Works.

Decatur Printing Company.

Two daily papers, three weekly papers.

Two hotels are building—one \$60,000, one \$300,000; the largest in the South.

Grand Opera House, \$100,000.

THERE ARE OTHER

Mammoth Enterprises

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company.

E. C. GORDON, President

H. G. BOND, Vice-Prest. and Gen. Manager.

W. E. FOREST, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

Which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the County Seat of Talladega County.

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A. & A. Railroad, and is the present terminus of the T. & C. Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and **THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE.** The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a **SUPERIOR QUALITY OF GAS.** Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A SASH, DOOR and BLIND FACTORY, a FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL, and various other industries are in successful operation, and the TALLADEGA ICE CO. cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A Spoke and Handle Factory and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent. within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. SPRING LAKE PARK is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., ✧ Talladega, Ala.

THE

Hercules Water Wheel

IN THE SOUTH.

WHAT SOUTHERN USERS SAY OF THE HERCULES.

There is probably no higher authority in the South on water wheels than Mr. John Hill, civil and mechanical engineer, of the great Eagle & Phenix Cotton Mills, at Columbus, Ga. Read what he says of the Hercules Wheel.

The Best Wheel We Have.

JOHN HILL, CIVIL AND MECHANICAL ENGINEER,
Reference—Eagle & Phenix Mfg. Co.

COLUMBUS, GA., April 30, 1887.

As to my opinion of the Hercules Wheel, will say: In our mill (the Eagle & Phenix) we have twenty-one (21) water wheels of various kinds, three of them being Hercules. I regard the Hercules as being by far the best wheel of any we have. It is the best in workmanship, absence from repairs, large per cent. in power, and in general satisfactory results. I know of no wheel its equal. At Holyoke, testing flume a few weeks since, I personally witnessed a test of a Hercules of the ordinary construction, which gave 83 96-100 per cent. of efficiency.

Yours truly,

JOHN HILL.

Cannot Speak too Highly of the Hercules Wheel.

JAMES RIDDLE, SON & CO.
Brandywine Cotton Mills.

KENTMERE, DEL., April 27, 1887.

In reply to your inquiry as to the working of a "Hercules Water Wheel" now running at our mills, would say that we put in nearly two years ago a 39-inch Hercules Wheel, running under a 144-foot head. It is driving up to full regular speed three hundred and three heavy looms, with only half gate. We are about to enlarge the weave mill and add three hundred more looms, which will be driven by the same wheel. We cannot speak too highly of the Hercules. It has absolutely run without cost or derangement since it started, and has given eminent satisfaction in every way.

Yours truly,

JAMES RIDDLE, SON & CO.

Perfectly Satisfactory in Every Way.

PORTER WOOLEN MILL.

J. H. Porter, President. J. W. Robertson, Gen. Manager.

CLARKSVILLE, GA., April 29, 1887.

In reply to enquiry as to my opinion of the Hercules Turbine Water Wheel, say: I have put in two, one about

six years since, and the other in 1883, and think so highly of the wheel that I shall use another in cotton mill this company is now constructing. Neither of the wheels alluded to have given the slightest trouble, and their working has been perfectly satisfactory in every way.

Yours truly,

J. W. ROBERTSON, Gen. Man.

The Hercules Wheels Have Given Perfect Satisfaction.

ROSWELL MANUFACTURING CO.

Sheetings, Shirtings, Checks, Yarns, &c.

ROSWELL, COBB COUNTY, GA., April 29, 1887.

In answer to yours of 25th inst., asking our opinion of the Hercules Wheel, will say our experience is as follows: In our new mill, built about four (4) years ago, we put a 30-inch Hercules Wheel, under a 21-foot head of water. It has given such satisfaction running this (5,000) five thousand spindle mill, that last summer, when we were compelled to put in a new wheel at our old mill, running 7,000 spindles, looms, twistors, &c., we put in a 36 inch Hercules Wheel, under a 27-foot head of water. All I can say is we have surplus power in both mills, have lost no time by any defect of wheels, and if we were putting up any more mills, would use the Hercules Wheel. They have given us perfect satisfaction.

Yours respectfully,

F. J. MINHINNETT, Prest.

A Good Wheel, and Has Given Good Satisfaction.

PEE DEE MANUFACTURING CO.

Plaids and Warps.

ROCKINGHAM, N. C., April 30, 1887.

We have been using the Hercules Water Wheel for more than six years. Our superintendent says it is a good wheel, has given good satisfaction, and its performance is equal to the claims of the maker. We have a head of 17 feet. Our wheel has a diameter of 39 inches. Under this water pressure the wheel has moved 4,000 spindles and the needed preparation, and 164 plaid looms. The above includes the dye house, machine shop and all other machinery which we employ.

Very respectfully,

WALTER L. STEELE, Prest.

Best Wheels I Have Ever Seen.

MARIETTA PAPER MANUFACTURING CO.,

Book, News and Wrapping Papers.

MARIETTA, GA., April 30, 1887.

In reply to your favor of the 25th inst.: I am using four Hercules Water Wheels, two 12-inch, one 24-inch,

and one 30-inch. They have given me perfect satisfaction, and I think that they are the best wheels that I have ever seen.

Yours truly,

S. A. ANDERSON.

Has Never Given the Slightest Trouble.

PACOLET MANUFACTURING CO.

Jno. H. Montgomery, Prest. and Treas.

PACOLET, S. C., April 29, 1887.

Replying to yours of 25th, would say: We have a 54-inch Hercules Water Wheel running, under 20-foot head, 12,000 spindles and 328 looms, with other necessary machinery. Has been running about three and a-half years, and has never given us the slightest trouble; not an hour's stoppage during the whole time.

Very truly yours,

JNO. H. MONTGOMERY, Pres. and Treas.

Well Satisfied With It.

WM. J. RUSSELL,
Manager Princeton Factory.

ATHENS, GA., April 28, 1887.

I have used the "Hercules" wheel since 1881, and am so well satisfied with it that I should not purchase any other it in want of a first-class wheel. It does all the manufacturers claim for it.

Yours truly,

WM. J. RUSSELL, Manager.

Has Given Entire Satisfaction.

HOLCUMB'S ROCK, BEDFORD CO., VA.,
April 28, 1887.

The Hercules Wheel has given entire satisfaction. Very respectfully,

J. A. HARRIS & CO.

Unhesitatingly Say its the BOSS Wheel.

BUZELA, GA., April 29, 1887.

I have been using a 21-inch "Hercules Water Wheel" since August 1880, and unhesitatingly say it is the BOSS wheel. It has performed with utmost satisfaction, and given more power than the makers claim, using water with more economy than any wheel I ever knew. T. W. G. Inglett, Esq., who has put up two "Hercules" for parties, says "it can't be beat."

Very respectfully,

BRAD. MERRY.

THE HERCULES

Gives the Most Power for its Size and the Highest Average Percentage from Full to One-Half Gate of Any Wheel Ever Made.

If you want to buy a new Water Wheel, if your old wheel does not give satisfaction, if you would like to know just how perfect a Water Wheel can be made, or if you are in any way interested in Water Wheels it will pay you to write for Catalogue No. 3 to the

HOLYOKE MACHINE CO., Worcester, Mass.

TRADE NOTES.

A COMPETENT and experienced man desires a position as superintendent of cotton mill. See advertisement signed "Cotton Manufacturer."

MESSRS. J. R. ROBERTS, E. E. G. Roberts and J. C. Roberts, of Anniston, Alabama, have formed a partnership as Roberts & Co., brokers and manufacturers' agents. They will establish an agency for handling machinery, railway and mill supplies, &c.

At a special meeting of the stockholders of the Wainwright Manufacturing Co., of Boston, held on October 26th, the following officers were elected: Jere. Abbott, president; John A. Loring, vice-president; Percival L. Everett, treasurer; C. D. Wainwright, general manager; James M. Betton, secretary. Directors: Jere. Abbott, John A. Loring, Percival L. Everett, Chas. S. Dana, Gideon Scull, Wm. B. Bacon and C. D. Wainwright. The company is doing a good business, and has a long list of unfilled orders on hand.

THE Wainwright Manufacturing Co., of Borton, report the following shipments of their corrugated tube feed-water heaters to the following places: Two in Boston; one each in Somerville and North Billerica, Mass.; Freeport, Presque Isle and Cumberland Mills, Maine; Montpelier and Burlington, Vt.; Phillipsburg and Dublin, Pa.; Davenport, Iowa; Augusta, Ga.; Yarmouthville, Nova Scotia; Banff, Northwest Territory; and Yokohama, Japan. They have also sold a filter and valve for shipment to Matanzas, Cuba, and state that sales of their specialties are most satisfactory, and inquiries and orders increasing daily.

ONE of the most pleasant facts that has been demonstrated by the tidal wave of prosperity that has of late been sweeping over the South is that the qualities of energy, activity and ceaseless industry which are found so largely developed in the men who have been engaged in building up the great West are also being developed in the younger generation of native born Southerners. In Anniston, the famous Model City of Alabama, fortunes have been accumulated as rapidly as anywhere in the West, and the means used to foster the growth of the city and enhance the value of real estate have been the same brisk energy, industry and progressive far-seeing public spirit which characterizes so many of our Western cities. Among the best exponents of this class of Southerners are Messrs. J. M., W. G. and J. H. Ledbetter, three gentlemen, all natives of Alabama, who compose the Ledbetter Land & Loan Association, of Anniston. The president of this association is Mr. J. M. Ledbetter, and the secretary and treasurer is Mr. J. H. Ledbetter, while the remaining member of the trio, Mr. W. G. Ledbetter, is a director in the Anniston City Land Co., the holder of various offices of trust in the city of Anniston, and they are among the foremost in every enterprise started with a view to the advancement of the growth and prosperity of the city. In addition to their reputation for energy and enterprise the Messrs. Ledbetter are all gentlemen of singular truth and honesty combined with sound business judgment. Their association has a capital of \$100,000 and owns some of the most desirable property centrally located in the city, as well as many charming sites for suburban homes. They have also some desirable farm lands and control large tracts of valuable mineral lands, among which are vast beds of kaolin and mica. They have unbounded faith in the future greatness of their beautiful city, and are willing to take stock of the Anniston City Land Co. at par in exchange for their lands. They are especially well posted as to the merits and present values of all classes of stocks and

securities dealt in in their city and vicinity, and are always ready and willing to give all information to inquirers in regard to the same. In a word any of our readers desirous of obtaining reliable information in regard to this wonderful Model City of Northern Alabama, its resources and future prospects, or who wish to make safe investments there, cannot do better than to put themselves in direct communication with the Ledbetter Land & Loan Association.

A HOTEL where the traveler can regulate his expenses to the size of his pocket-book and at the same time have every comfort and convenience deserves to be patronized. At the Grand Union Hotel, opposite the Grand Central Depot, New York, handsome rooms can be obtained for \$1 per day and upwards. The restaurant is excellent and the prices are moderate. The hotel is first-class in every respect.

Speed on Southern Railroads.

The Queen & Crescent Route, running trains from Cincinnati to New Orleans and Shreveport, La., and passing through Chattanooga, Birmingham, Tuscaloosa, Meridian, Jackson and Vicksburg, has, with its "Queen & Crescent Limited Express," reduced the time between Cincinnati and New Orleans (827 miles) to twenty-five and a half hours. This train leaves Cincinnati at 7:55 A. M., and arrives at New Orleans at 9:30 next morning.

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

THE American House, Boston, has been long and favorably known as one of the best hotels in the East. Its central location makes it equally desirable for business or pleasure.

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COTTON SEED OILS.

Crude, Summer White and Yellow,
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White and Yellow Stearine.

Soap Stock.

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Oil shipped in tank cars or in barrels.

Correspondence of buyers from all sections solicited—to be addressed to the Philadelphia office.

All the mills of the SOUTHERN COTTON OIL COMPANY are entirely new, built upon the most improved plans, with the best possible mechanical appliances and facilities for handling product advantageously and economically.

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METAL-PLATE WORK; its Patterns and their Geometry. Also notes on metals and rules in measurement. For the use of tin, iron and zinc-plate workers, cooper-smiths, boiler makers and others. By C. T. Mills. 311 pages, with six plates and numerous diagrams. \$1.00, cloth \$2.

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Circular Saws, solid and inserted joint. Crescent Ground Cross Cut Saw, Gang Mill, Mulay and Drag Saws, Milled Tooth Band Saws. Planer Knives, Paper Cutting Knives, Leather Splitting Knives. Knives made to any pattern furnished.

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Giving greater efficiency than any other Centrifugal Pump on the market. Send for catalogue.

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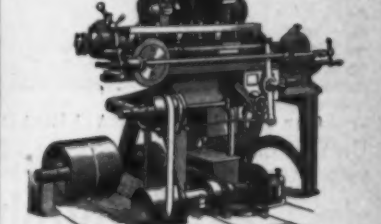
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By a thoroughly competent man, strictly temperate in his habits, a situation as superintendent of cotton mill. Has had twenty years' experience, and can refer to his present employers and other responsible parties. Contemplates leaving his present position for personal reasons. Southern States preferred. Address COTTON MANUFACTURER, CARE MANUFACTURERS' RECORD.

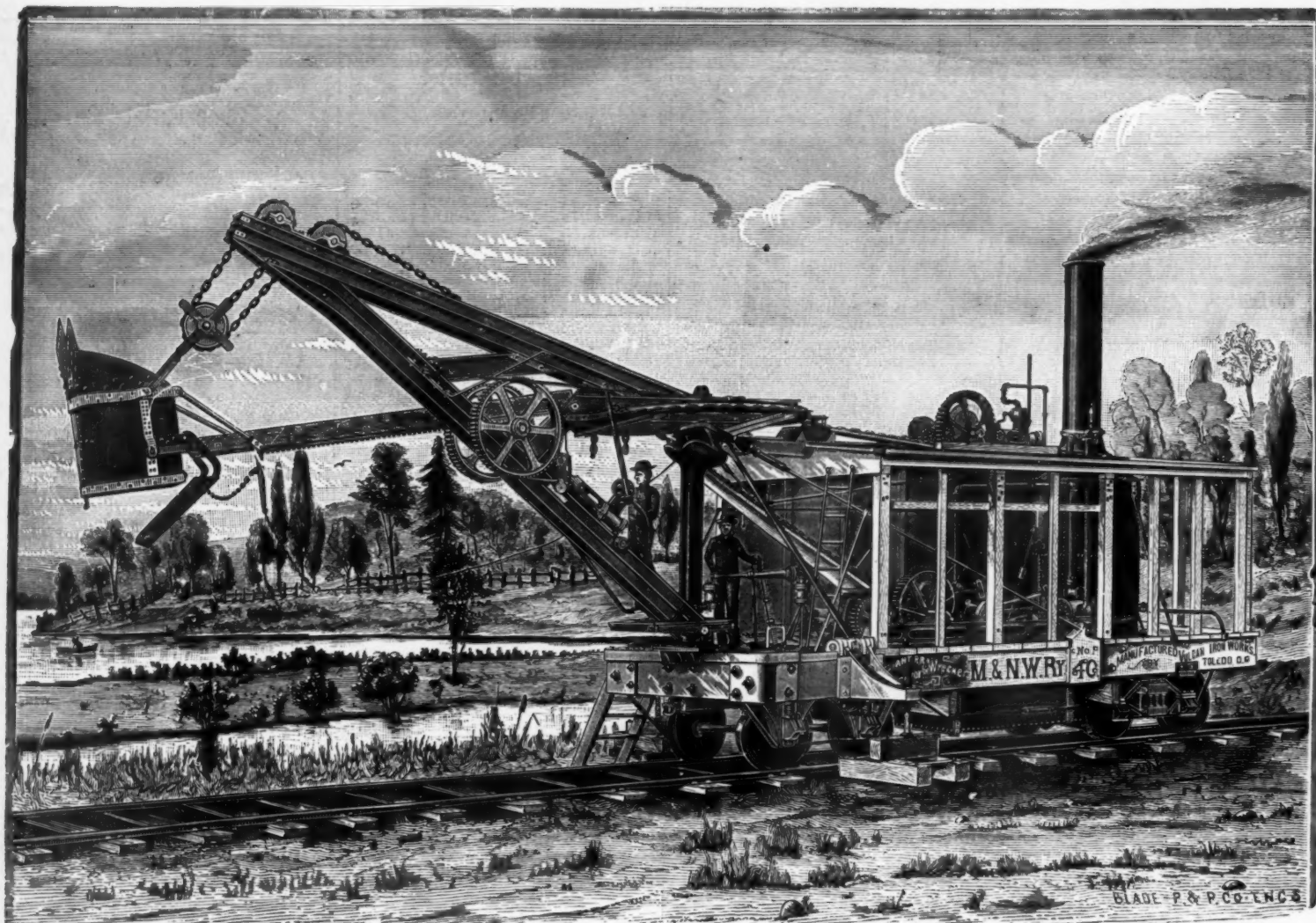
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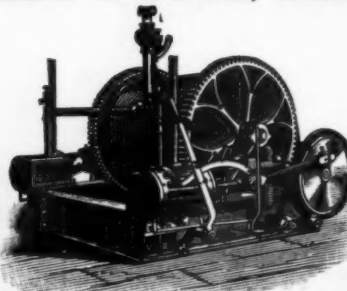
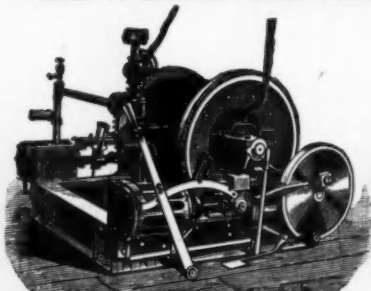
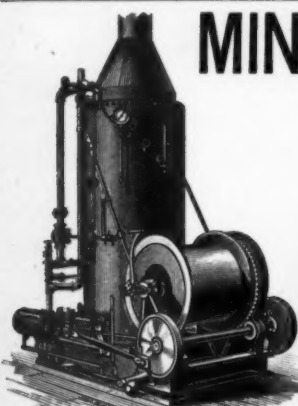
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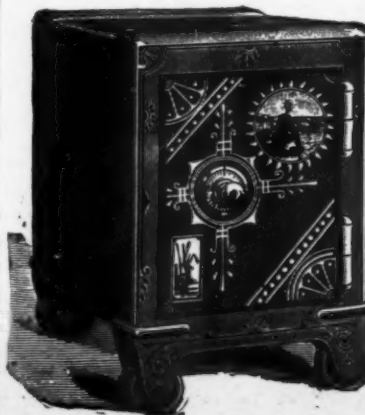
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The Best on Wheels. Light, strong, convenient, and low priced. Handy to get into and out of. Handy for single horse or pair. Handy for one person or more. Handy to load or unload. Send for free circular, "How to purchase direct from Manufacturer."
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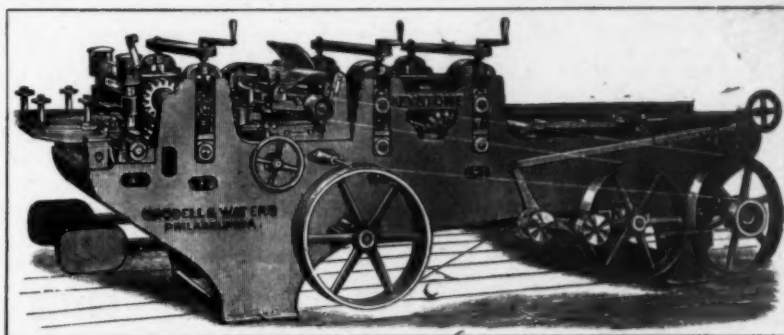
Any business house can handle our Safes in connection with any other line of goods without additional expense or interference with any other business.

No.	Weight.	Inside Measure.	Outside Measure.	Retail Price.
No. 2,	250 lbs.	12x8x8 1/4 in.	23x14x13 in.	\$30
No. 3,	500 lbs.	15x10x10 in.	28x18x18 in.	35
No. 4,	700 lbs.	18x14x12 in.	32x22x21 1/2 in.	45

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Rapid Feed Flooring Machine.



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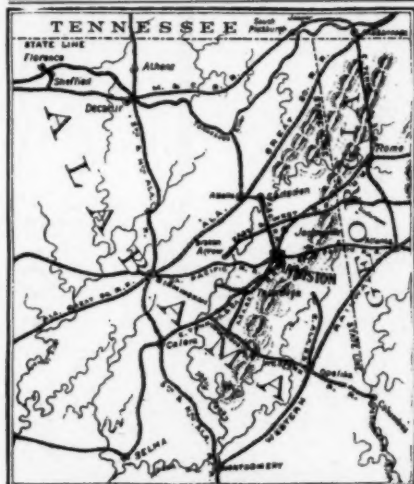
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ELECTRIC COPPER WIRES, Plain and Covered. Particular Attention given to Cutting Blanks and Metals to Order.



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SUPERIOR TO ANY OTHER LAMP

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Easily Extinguished. Absolutely Non-Explosive. Unrivalled in Brilliancy and Volume of Light. Manufactured in Fount, Vase and Stand Styles.

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Takes the same Wick and Chimney as No. 2 Rochester.

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THE COLOSSUS LAMP.

The Climax of Illuminators: THE "COLOSSUS,"

Especially adapted for BILLIARD PARLORS, STORES, CHURCHES, RAILROAD STATIONS, BARBER SHOPS, HALLS, HOTELS, WAREHOUSES, FACTORIES, BASEMENTS, and other Large Areas.

The Actual Size of The "Colossus" is 4 times as large as cut.

And produces a Light equal to 4 Electric, Jumbo or Rochester Lamps.

We are also Manufacturers of THE "CLEVELAND" LAMP; THE "ORIENT" CLUSTER LAMP; NON-EXPLOSIVE LAMPS; STUDENT LAMPS; RAILROAD LAMPS; HARVEY BURNERS; GAS FIXTURES, and other Specialties in Brass or Bronze.

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Patent Needle Pointed **CARD CLOTHING,**
Hardened and Tempered Steel Wire
For COTTON and WOOLEN MILLS.
T. K. EARLE MFG. CO. SEND FOR SAMPLES.
WORCESTER, MASS.

Phillips, with Augers.....	2.00	7.50
BRACKETS.			
Shelf, plain.....	dis	per doz
Shelf, Fancy.....	dis	per doz
SKEWET WIRE GOODS.			
Wire list.....	dis	75kts
NAIL RINGS.			
Union Nut Co.....	dis	55
Sargent's.....	dis	5kts
Humason, Beckley & Co's.....	dis	70
BUTTS.			
Wrought Brass.....	dis	34
Cast Brass, Fast Joint.....	dis	34
Cast Brass, Loose Joint.....	dis	33
Fast Joint, Broad.....	dis	6kts
Fast Joint, Narrow.....	dis	6kts
Loose Joint.....	dis	6kts
Loose Joint, Japanned.....	dis	6kts
Loose Joint, Jap, with Acorns.....	dis	6kts
Parliament Butts.....	dis	6kts
Mayer's Hinges.....	dis	6kts
Loose Pin, no Acorns.....	dis	6kts
Loose Pin, Acorns.....	dis	6kts
Loose Pin, Acorns, Japanned.....	dis	6kts
Loose Pin, Acorns, Jap'd, Plated.....	dis	6kts
Tip.....	dis	75
Wrought Iron.			
Fast Joint, Narrow.....	dis	75
Fast Joint, Lat. Narrow.....	dis	75
Fast Joint, Broad.....	dis	75
Sargent's Hinges.....	dis	75
Table Butts, Back Flaps.....	dis	75
Inside Blind, Regular.....	dis	75
Inside Blind, Light.....	dis	75
Loose Pin, Wrt.....	dis	75
Loose Pin, Light.....	dis	75
Spring Hinges.....	dis	75
Geor's Spring and Blank Butts.....	dis	75
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NOW FIN.			
Humason, Beckley & Co's.....	dis	5kts
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BUTCHER'S CLAYERS.			
Humason & Beckley Mfg. Co.....	dis	5kts
Bradley's.....	dis	5kts
Beatty's.....	dis	5kts
1 1/2 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	dis	5kts
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THE MARKETS.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, NOV. 9, 1887.

Business continues good throughout the South, and the indications point to great activity in all lines of trade and industry during the winter.

In manufactured iron the local market is unchanged, the volume of trade being fairly good and prices as last quoted, viz:

Ref. Bar Iron, 2 to 6x3/4 to 1.....	2.10	2.40c
" " 1 to 4x1 1/4 to 1.....	2.10	2.40c
" " 1/2 to 2, round and.....	2.10	2.40c
Squares.....	2.10	2.40c
Hoop Iron, 1 1/4 wide and upward.....	2.50	3 c
Hand Iron, from 1 1/4 to 6 in. wide.....	2.40	3 1/2 c
Horseshoe Iron.....	3	3 1/2 c
Norway Nail Rods.....	2 1/2	3 1/2 c
Black Diamond Cast Steel.....	3	9 c
Machinery Steel.....	3	4 1/2 c
Spring Steel.....	3 1/2	4 c
Common Horse Nails.....	2 1/2	4 c
Railroad Spikes, 5/8x9-16.....	2 1/2	3 c
Steel Boiler Plates.....	2 1/2	4 c
Iron Boiler Plates.....	2 1/2	4 c
Boiler Tubes.....	50	off list

The demand for pig iron is good and consumption keeps well up. Steel rails, it is thought, have reached their lowest point. We quote as before, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	28	00	29	00
Virginia C. B. Charcoal Wheel Iron.....	27	00	29	00
Anthracite, No. 1.....	30	00	29	00
" " 2.....	28	00	29	00
" " 3.....	26	00	28	00
" " Mottled and White.....	24	00	25	00
Old Rails.....	22	00	23	00
Old Steel Rails.....	22	00	23	00
No. 1 Wrought Scrap.....	20	00	21	00
Old Car Wheels.....	18	00	19	00

HARDWARE.

The demand for Hardware is satisfactory. Owing to the advance in copper, an advance in copper rivets and bars and wire may be expected. Screws are very firm, and an advance in price is expected by some of the leading dealers. The Iowa Farming Tool Co., who have heretofore had a large Southwestern trade, are coming into the Eastern market with their celebrated goods, which they are offering at same prices as other makers. Trade still continues good in the South and the jobbers of that section are in fine spirits. The demand for bolts at present prices is good, and we have heard of no cutting. No changes to report.

Nails are still quoted at \$2.05 to \$2.10, but there is a good deal of cutting in prices.

Philadelphia Iron Market.

PHILADELPHIA, Nov. 7, 1887.

The chief interest this week is manifested in the steel rail market. A number of large buyers who have been holding off for some time are beginning to be apprehensive of a reaction in prices. The idea gaining ground is, that steel rail makers will shut down their mills rather than let prices go lower or even stay where they are. Steel rail makers themselves are very reticent as to what they may do or how soon they may undertake to do anything. The lowest price that we have any actual knowledge of is a 10,000 ton lot at \$33. We hear more or less talk of larger lots going to Boston at \$32 to \$32.50. One or two large sales have been made for that point in competition with foreign rails, which brokers are endeavoring to unload in this market. Foreign rail makers may take it for granted that they will sell very few rails on this coast this winter. This is the time to look out for wild rumors about importation. Quotations are \$34. We have had several active weeks in the bar iron trade, but the past few days have shown a falling off. Quotations are \$2 to \$2.10 for refined iron and one to two-tenths less for medium and common. An immense amount of business has been done since the first of October. Mills are all well fixed. Skelp iron is moving rapidly at two cents. Plates and angles \$2.30 to \$2.50. Mills are full of orders. The ship yards are excellent customers. Some good sized orders for steel have been booked for delivery to the locomotive works. In crude iron grey forge is taking the lead. A good many large lots

have sold at \$17; fifty cents more is asked for the best. Stocks are light. Foundry iron is rather dull this week owing to the difficulty of obtaining the kinds of iron mostly wanted. No. 1 is \$22. Nails are dull at 2 to 2.10. Bridge iron is active enough, considering the amount of orders on hand. Some small bridge work is coming in and manufacturers think they will have a very busy winter.

COAL.—Coal freight rates are quoted strong to-day at \$1.25 and vessels scarce. There never was such an interesting time in the anthracite coal trade and yet it is more difficult to get news that is news than when there was scarcely anything doing. There is nothing else to be said but that coal is in active demand. Buyers are charging into the market and never pay much attention to counter charges, so they get coal. The capacity employed is run to its utmost limit, and the miners are having, for the first time in many years, all the work they can do day and night for that matter. The agitations pro and con between miners and their employers are matters of too daily occurrence to call for rehearsal in a trade article. The fact is simply this, and the information is obtained from miners themselves, that they propose to fight this fight out to the end, at least that is the talk of outside circles among workmen. The Knights here propose to see the miners helped through the fight to the very utmost of their ability. Funds available for immediate distribution are scarce and measures are now being prepared to put in operation to gather sufficient money to carry the strike to a successful end. The little advances made by employers are simply strengthening the miners and so far as ending the strike goes they are a failure. It is not an easy matter to get a coal order accepted, excepting at the option of the taker. The difficulty is, that there is such an urgent increasing demand for coal that purchasers will not bind themselves with a cast iron agreement. The advancing tendency in prices is one reason for this, besides there is no necessity to bind themselves. We had a meeting of operators here the other day, but nothing came of it excepting to agree to stand firm. The resolution reads strong, but it is understood there were several members at the conference who felt anything but strong. Another meeting will likely take place this week. The local and line trade is very active. Coke is becoming scarce. There is an unsufficiency of cars at various mines in the State, but the obstacle is being gradually overcome. The car works are working by electric lights at some points in order to get through with their work. The bituminous trade is extremely active and we hear booming reports all around. Coastwise freights are moving up and there is no telling where they will stop. The situation is certainly encouraging to coal producers everywhere. Public opinion in the anthracite region is with the miners who are asking for a trifling advance while the coal producers are realizing an increase many times the amount asked.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, November 7, 1887.

The past few days have developed the fact that not less than 37,000 tons of Southern coke iron have been bought in the North in the past two weeks. Three-fourths of this was taken by pipe works at Newport, Louisville and St. Louis, and is for No. 1 and No. 2 mill almost entirely. About 4,000 tons foundry grades were sold by one company at Eastern seaboard points where the prices realized net, something better than Western prices. These sales practically put two or three of the largest companies out of the market on mill iron grades until next spring. It has invariably happened in the past that a heavy, concerted buying by large pipe makers has been followed by a period of activity through the Western market and sellers look for the same result now. The prices of these transactions (the deliveries of which run nearly through next year) are understood to be a little under the minimum

NIAGARA STAMPING & TOOL CO.

MANUFACTURERS OF

PRESSES, DIES AND TOOLS
For Working Sheet Metal.
Fruit Can Dies and Tools,
Cannery Outfits, Squaring Shears, &c.

TINNERS' TOOLS AND MACHINES,

Office and Works, Cor. Randall and Superior Sts., BUFFALO, N. Y.
Write for our Catalogue and Price-List. Please mention this paper.

D. SAUNDERS' SONS,

MANUFACTURERS OF THE ORIGINAL

TRADE **I.X.L.** MARK.

Pipe Cutting and Threading Machine.

BEWARE OF IMITATIONS. None genuine without our Trade Mark and name. Also

Patent Wheel Pipe Cutter

STEAM AND GAS FITTERS' HAND TOOLS.

Pipe Cutting and Threading Machine

For Pipe Mill Use a Specialty. Send for Catalogue B.

YONKERS N. Y.

BRADLEY'S UPRIGHT CUSHIONED & HEATING FORGES
HELVE HAMMER FOR COAL AND COKE

WITH A MANUFACTURING EXPERIENCE OF OVER HALF A CENTURY WE RECOMMEND THESE MACHINES TO BE THE BEST SIMPLEST, MOST DURABLE AND COMBINING ALL THE ESSENTIAL ELEMENTS.

ESTABLISHED 1832

BRADLEY AND COMPANY, SYRACUSE, NEW YORK.

The F. F. ADAMS CO., Erie, Pa.

MANUFACTURERS OF

Hardware Specialties and Household Articles.

WRINGERS, Ladders, Trucks, Cork Pullers, Mouse and Rat Traps, Bread Cutters, Lawn and Street Sprinklers, etc., etc.

Steam Flue Cleaners.

Agents wanted in every Southern city and town. Hardware dealers write for our catalogue and prices. Send for Sample order.

SHULTZ BELTING
MANUFACTURERS OF
OUR BELTING
is tanned on the surfaces only; the
INTERIOR is RAW HIDE.
Send for Our Valuable Book for Engineers and Belt Users. Free.
Agents in all Cities. Send for Trial Belt.
Address SHULTZ BELTING CO., St. Louis, Mo.

quotations below. Having placed so large a quantity the companies are disposed to hold firmer and an arrest of the decline if not a reaction in prices is the result. Taking the whole market together a distinctively better feeling is noticeable. The rank and file of buyers, however, still understand that iron is declining and delay purchases to the last. We quote:

HOT-BLAST FOUNDRY.

Ohio and Southern Strong Coke No. 1.	\$20 50@51 00
" " " " No. 2.	20 00@50 00
" " " " No. 3.	19 00@49 50
Ohio Soft Stoneseal.	No. 1. 20 50@51 50
Ohio Soft Stoneseal.	No. 2. 19 50@50 00
Mahoning and Shenango Valley Coke.	21 50@52 00
Hanging Rock Charcoal No. 1.	23 00@53 00
" " " " No. 2.	22 00@52 00
Tennessee & Alabama Charcoal No. 1.	21 50@52 00
" " " " No. 2.	20 50@51 00

FURNACE.

Strong Neutral Coke.	\$17 75@18 50
Mottled " "	16 00@16 50
Cold Shortings.	17 00@17 50

CAR WHEEL AND MALLEABLE.

Southern Car-Wheel Iron.	\$4 50@50 00
Hanging Rock Cold Blast, No. 1.	25 00@55 00
Hanging Rock Cold Blast, No. 2.	—
Lake Superior Malleable.	24 50@55 50

Louisville Iron Market.

Specially reported by Geo. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., Nov. 7, 1887.

The tendency of the Louisville market during the past week has been towards improvement. While buying has not been liberal, yet in comparison with previous weeks, it has shown a very marked improvement. Furnaces are still unable to supply all of the iron called for, as they are busy shipping on old orders. Mill grades seem to be most in demand, but some sales have been made of car wheel iron. While current sales are not large, there is no prospect of an accumulation at furnaces, as their stocks for some months have been very low. Prices remain stationary. We quote for cash as follows:

PIG IRON.

Southern Coke, No. 1 Foundry.	\$20 50@51 00
" " " " " " " "	19 50@50 00
" " " " " " " "	18 50@49 50
Hanging Rock Coke, No. 1 Foundry.	23 00@53 00
" " " " " " " "	22 00@52 00
Southern Charcoal, No. 1 Foundry.	23 00@53 00
Silver Gray, different grades.	23 00@53 00
Southern Coke, No. 1 Mill, Neutral.	17 50@18 50
" " " " " " " "	17 00@18 00
Southern Charcoal, No. 1 Mill.	—
White and Mottled, different grades.	15 00@16 00
Southern Car Wheel standard brands.	24 00@55 00
" " " " other brands.	23 00@54 00
Hanging Rock Cold Blast.	24 50@55 00
" " " " Warm " "	21 00@52 50

St. Louis Iron Market.

Specially reported by ROGERS, BROWN & Co., Gay Building, 304 N. 3rd street, St. Louis. W. H. SHIELDS, Manager.

ST. LOUIS, Nov. 7, 1887.

The large orders booked by the Southern furnaces within the past two weeks has had a tendency to stiffen prices to some extent. Southern furnaces without hardly an exception are behind on their orders for No. 2 foundry and Ohio softeners for delivery within the next 30 days, are extremely scarce. The market taken as a whole looks better than at any time within the past three weeks, and the prospects are that we will have a good active trade for some months to come. We quote:

HOT-BLAST CHARCOAL.

Missouri.	\$20 00@51 00
Southern.	21 00@52 00

COKE AND COAL.

Southern No. 1.	\$20 50@51 75
Southern No. 2.	20 00@51 00
Ohio Softeners.	21 50@53 00

MILL IRONS.

Missouri.	19 00@19 50
Southern No. 1.	18 00@19 00
Southern No. 2.	17 00@18 00

CAR-WHEEL AND MALLEABLE IRON.

Southern.	\$4 00@57 00
Lake Superior.	23 00@54 00

SCRAP, &c.

Old rails.	—
Old wheels.	—
Connellsville Coke (Frick's).	—@6 25

Chicago Iron Market.

Specially reported by ROGERS, BROWN & Co. W. W. BACKMAN, Resident Agent.

CHICAGO, Nov. 7, 1887.

The principal event in iron circles here the past week was the meeting, on the 3d instant, of the makers of charcoal iron. It was an adjourned meeting from the gathering at Detroit. The constitution was changed so as to limit the association to Lake Superior charcoal iron makers, and the name changed to correspond. About half of the producers in the district were present or represented. Demand for iron has been better during the week, but the buying has been mostly in small lots. It is safe to say that never in the history of the trade have dealers entered so many orders in number as they are now doing. Prices have shaded down a trifle, except for No. 1 Ohio softeners, which are still scarce and in rather urgent demand. We quote for cash f. o. b. cars Chicago:

COKE AND STONE COAL FOUNDRY.

Ohio (Hanging Rock) Softeners No. 1.	22 00@53 50
" " " " " " " "	22 00@53 00
" " " " " " " "	22 00@52 50
" " " " " " " "	21 00@52 00
Southern Coke, No. 1.	21 50@52 75
" " " " " " " "	20 75@51 25
" " " " " " " "	19 75@50 25

CHARCOAL FOUNDRY.

Lake Superior.	\$22 25@53 25
Southern.	22 00@53 50
Hanging Rock.	24 50@55 50

CAR WHEEL AND MALLEABLE.

Lake Superior.	\$22 25@53 25
Standard Southern.	24 50@57 50
Hanging Rock, cold blast.	27 50@58 50
" " " " warm blast.	24 50@55 50

OLD MATERIALS.

Old Rail, American.	\$4 50@55 00
Old Wheels.	20 50@51 50

Chattanooga Iron Market.

Specially reported by LOWE & TUCKER, Brokers and Commission.

CHATTANOOGA, TENN., Nov. 7, 1887.

Business is as fresh as ever, and everybody seems desirous of improving the present fine weather. Building was never as brisk as it is at the present time in almost all sections of the South, and as a consequence all building material is in very heavy demand. Cotton is now moving in large quantities, and the railroad lines are, of course, overstocked as usual. There is no diminution in the demand for pig iron, and prices are being well maintained notwithstanding rumors of decline in other sections. The fact is, the furnaces are under contract for nearly all of their output for some months to come, which makes them quite easy as to the future. We quote No. 1 \$18.50, and No. 2 \$17.50 on a basis of 60 days.

A TIN or metal roof painted with two coats of Dixon's Silica Graphite Paint, and a third coat the following season, will not need painting again for 10 years or longer. Send for circulars and testimonials, and a sample piece of tin roof that was painted 13 years ago. Address Jos. Dixon Crucible Co., Jersey City, N. J.

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FANOUS ENSILAGE AND FEED CUTTERS.



They are more substantial, easier to operate, have greater capacity, are less liable to accidents than any other Cutters. We build nine sizes, six for power, furnished with or without carriers. Our illustrated catalogue, containing also valuable information on the subject of Silos and Ensilage, sent free. Liberal discounts and terms to dealers. Write for prices.

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SALEM, OHIO.

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WRITE FOR DISCOUNTS.

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TANNERS OF OAK LEATHER.

Specialties—Fine Harness, Superior Saddle Skirting, Black and Fair Bridle.

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Douglas Mfg. Co.	dis 20x10
Douglas Mfg. Co.	dis 20x10
Cowles Mfg. Co.	dis 20x10
Stanley Rule & Level Co. s. Var. Hds.	dis 60
Stanley Rule & Level Co.'s Black Hds.	dis 50
Ratchet	dis 35
Clark's Patent	dis 25
Shepardson	dis 25

SPOKE TRIMMERS.

Bonney's	dis 20x10
Stearns	dis 20x10
Ives	dis 20x10
Douglas	dis 20x10

SILVER PLATED WARE.

Wm. Rogers Manf. Co.	dis 20x10
Holmes, Booth & Hayden	dis 20x10
Wallace's Steel Silver Plated	dis 20x10
Rogers Bros 1847	dis 20x10
C. Rogers & Bro.	dis 20x10

SCREWS.

Standard new list, Feb. 15.	
Flat Head Bright	70
Round Head Bright	65
Round Head Bright	65
Flat Head Brass	65
Round Head Brass	65
Flat Head Blue (add 5¢ to net)	40
Brass and Silver Capped	40
Japanned Flat Head	65
Coach, Patent Gimlet Point	dis 60x5
Coach, Common or Lag	dis 70
Bed	dis 25
Machine, Flat Head, Iron	dis 55
Machine, Round Head, Iron	dis 50
Bench, Iron	dis 55x10
Bench, Wood, Beach	dis 25
Bench, Wood, Hickory	dis 25
Hand, Wood	dis 25x10
Hand Rail, Sargent's	dis 25x10
Hand Rail, Humason, Beckley & Co.'s	dis 40x10
Hand Rail, Am. Screw Co., list Jan. 1, '81	dis 70
Jack (Wilson's)	dis 25

SCREEN FRAMES AND FIXTURES.

Standard Window Screens No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	
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PORTER'S PATENT WINDOW AND DOOR SCREEN FRAMES.

Porter's Patent Window and Door Screen Frames	
No. 1. Set for Window, 24" x 36"	dis 40
No. 2. " " " " " " " "	dis 40
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SHRUBS AND SCISSORS.

American (Cast) Iron	dis 20x10
Pruning	dis 20x10
Barnard's Lamp Trimmers	dis 20x10
Timmer's	dis 20x10
Massachusetts	dis 20x10
Seymour's	dis 20x10
Jersey Shears	dis 20x10
W. W. & Son, Nickel	dis 20x10
Japanned	dis 20x10

SHRUBS.

Sliding Door, M. W. & Co., List	dis 20x10
Sliding Door, R. & E. list	dis 20x10
Sliding Door, Patent Roller	dis 20x10
Sliding Door, Pt. Roller, Hatfield's	dis 20x10
Sliding Door, Russell's Anti-Friction	dis 20x10
Also see Hangers	

SHOVELS AND SPADES.

Ames, New List, November 1 1885	dis 20x10
Griffiths	dis 20x10
Remington's (Lowman's Patent)	dis 20x10
Rowland's	dis 20x10
Lippincott, new list	dis 20x10
Hawley, Sims & Co.	dis 20x10

SILVER PLATED HOLLOW WARE.

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Meriden Britannia Co.	dis 20x10

SOLDERING IRONS AND COPPERS.

Cover's Soldering Irons	dis 20x10
Cover's Adjustable Coppers	dis 20x10

SPOONS.

Britannia	dis 20x10
Tinned, Iron, Table and Tea	dis 20x10
Tinned Iron Basting	dis 20x10
German Silver	dis 20x10

STONE.

Hindustan No. 1, 4c; Axs, 3c	dis 20x10
Sand Stone	dis 20x10
Washita Stone	dis 20x10
Washita Stone, Slips	dis 20x10
Arkansas	dis 20x10

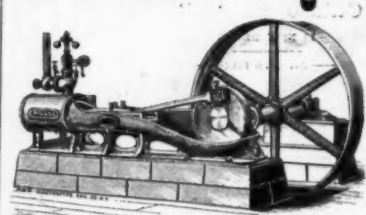
SQUARES.

Steel	dis 20x10
Iron	dis 20x10
Nickel Plated	dis 20x10
Try Square and T Bevels	dis 20x10
Western's Try Square and T Bevels	dis 20x10

TACKS, BRADS, &c.

American Iron Carpet Tacks, all kinds	dis 20x10
Steel Carpet Tacks, all kinds	dis 20x10
Swedes Iron Carpet Tacks, all kinds	dis 20x10
Swedes Iron Tacks	dis 20x10
Swedes Iron Upholsterers' Tacks	dis 20x10
Tinned Swedes Iron Tacks	dis 20x10
Tinned Swedes Iron Upholsterers' Tacks	dis 20x10
American Iron Cut Tacks	dis 20x10
Gimp and Lace Tacks	dis 20x10
Tinned Gimp and Lace Tacks	dis 20x10
Copper Tacks	dis 20x10
Copper Finishing and Trunk Nails	dis 20x10
Cigar Box Nails	dis 20x10
Finishing Nails	dis 20x10
Trunk and Clout Nails	dis 20x10
Tinned Trunk and Clout Nails	dis 20x10
Basket Nails	dis 20x10
Chair Nails	dis 20x10
Zinc Glaciers' Points	dis 20x10
Common and Patent Brads	dis 20x10
Hungarian Nails and Miners' Tacks	dis 20x10
Tinned Capped Trunk Nails	dis 20x10

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Term Glasses.....dis 25 1/2

Winsted.....dis 25 1/2

TON CALS.
Winsted.....dis 25 1/2

TRAPS.
Game, Newhouse.....dis 35 1/2

Game, Oneida Pattern.....dis 60x10 1/2

Game, Blake's Patent.....dis 40x10 1/2

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Mouse, Round Wire.....dis 20x10 1/2

Mouse, Catch-em-alive.....dis 20x10 1/2

Cyclon Mouse.....dis 20x10 1/2

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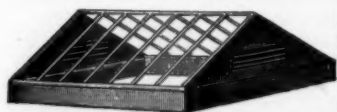
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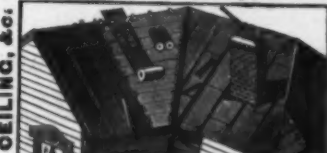


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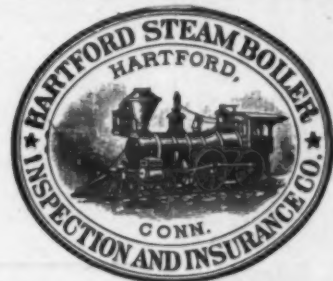
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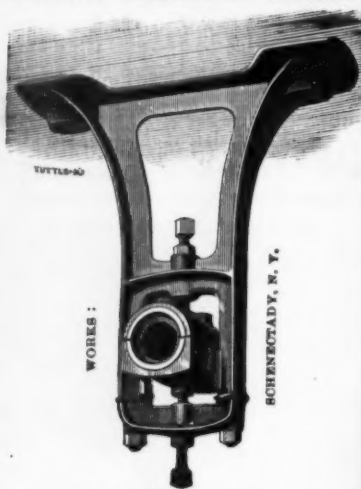
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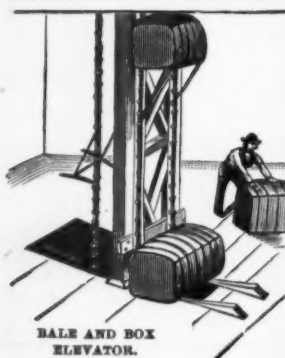
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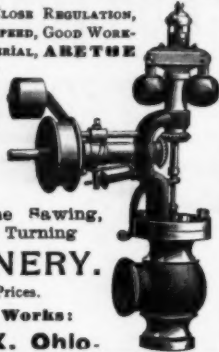
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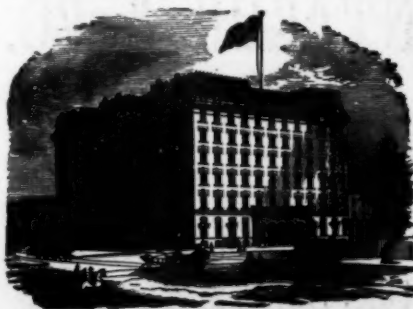
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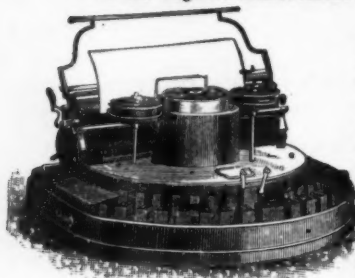
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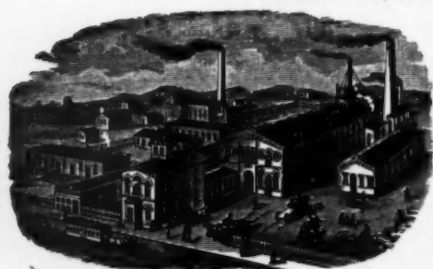


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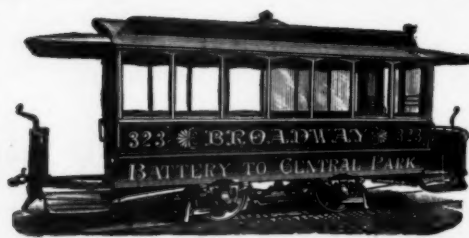
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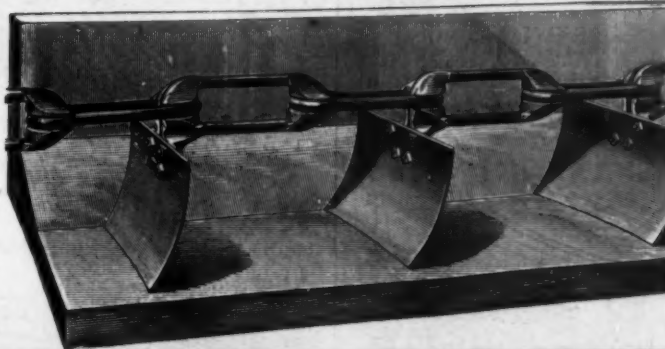
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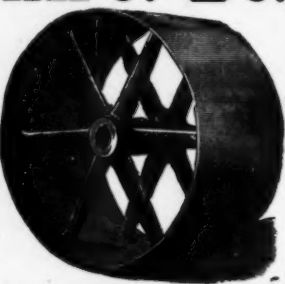
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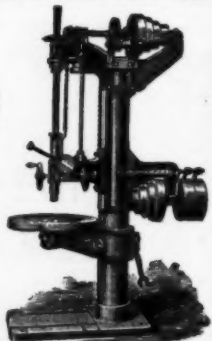
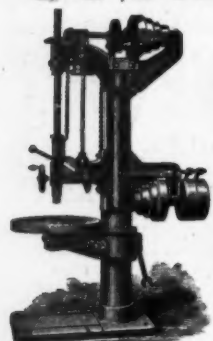
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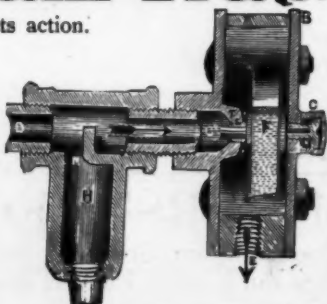
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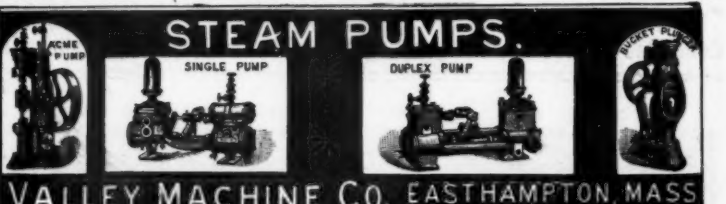
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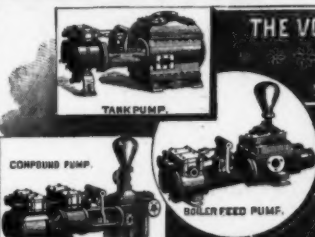
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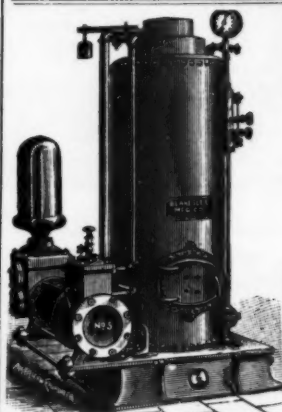


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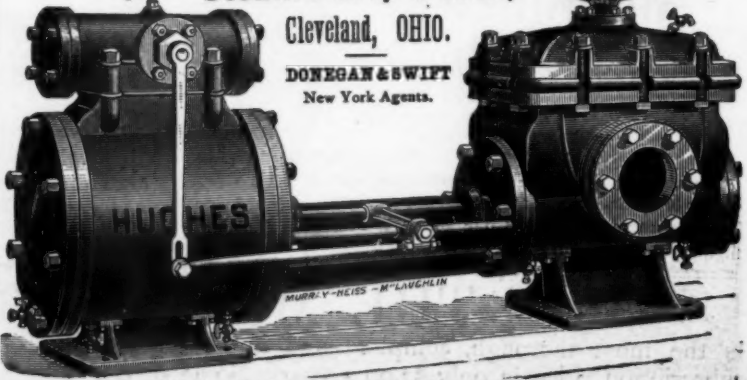
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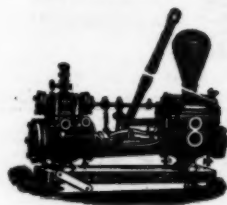
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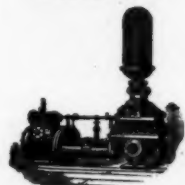
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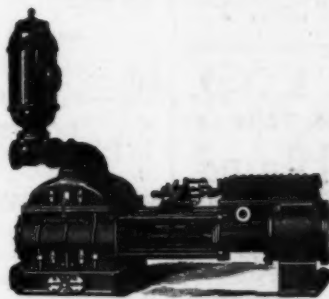


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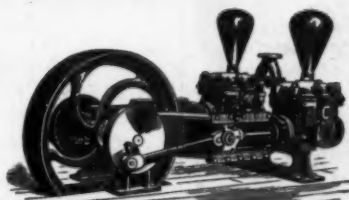


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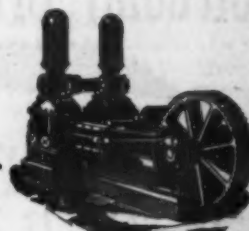
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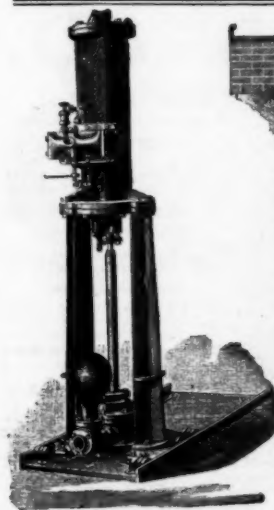


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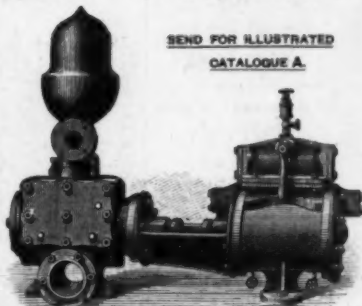


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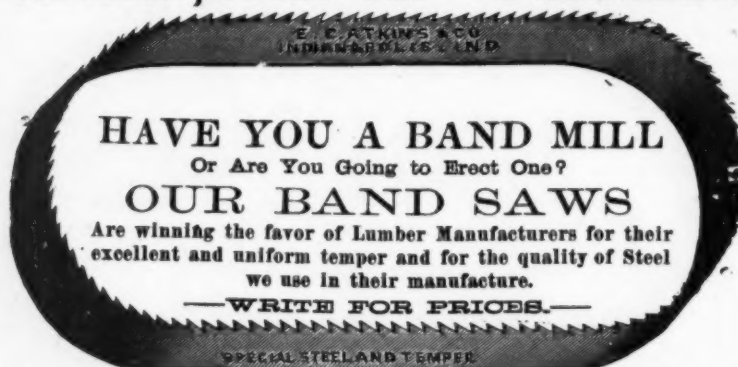
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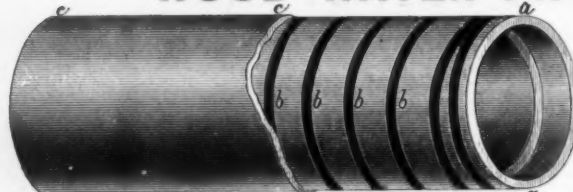
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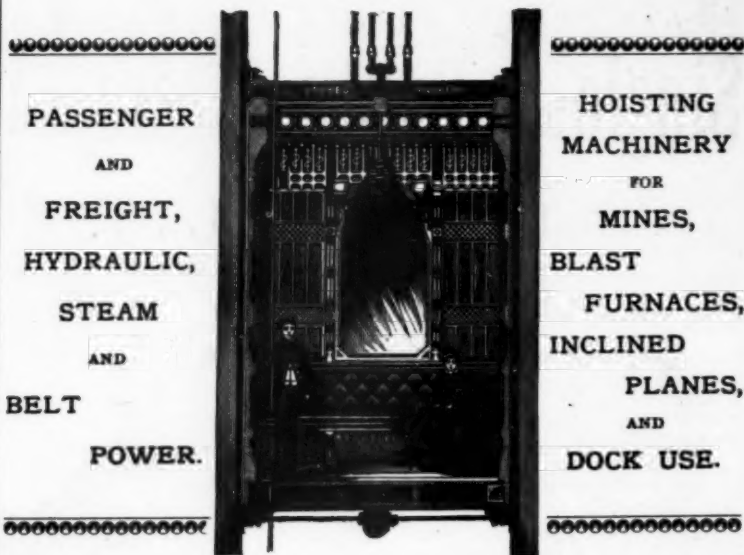
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